Manufacturing License(s):
Guangdong CFDA Production Permit No.20122140
Registration certificate(s):
GDMPA Certified 20192080990
production date is shown in the certificate or machine

Manufacturer：
Guangzhou Life Light Electronic Technology Co.,Ltd.
Address of manfacturer：
Room A101, no. 5, kesheng road, guangzhou private science and technology park, 1633 beitai road, baiyun district, guangzhou

File No: OZ-1-08TM0
Date of revision:2020.04.03
Version：V1.1

OXYGEN CONCENTRATOR

MOST EFFECTIVE RESPIRATORY THERAPY

Model : OZ-1-08TM0

USER MANUAL

Read this instruction manual carefully before use

Supervised by Owgels Germany Group Corporation

DO NOT OPERATE THIS DEVICE WITHOUT FIRST READING AND UNDERSTANDING THIS MANUAL. IF YOU ARE UNABLE TO UNDERSTAND THE WARNINGS AND INSTRUCTIONS, CONTACT YOUR EQUIPMENT PROVIDER BEFORE ATTEMPTING TO USE THIS EQUIPMENT; OTHERWISE, INJURY OR DAMAGE MAY RESULT.

Smoking while using oxygen is the number one cause of fire, injury and death. You must follow these safety warnings.

Do not allow smoking, candles, or open flames within the same room of the device or the oxygen-carrying accessories.

Smoking while wearing an oxygen cannula may result in facial burns or likely death.

Removing the cannula and placing it on surfaces such as bedding, sofas, or other cushion material will cause a flash fire when exposed to a cigarette, heat source or flame.

If you smoke, you must follow these 3 life-saving steps: turn off the oxygen concentrator, take off the cannula and leave the room where this device is located.

“No Smoking-Oxygen in Use” signs must be prominently displayed in the room, or where the oxygen concentrator is in use. Patients and their caregivers must be informed about the dangers of smoking in the presence of, or while using medical oxygen.

CONTENTS

1. Intended Use and Instructions

Intended Use

The OZ-1-08TM0 Oxygen concentrator is designed to provide supplementary oxygen to patients who have been diagnosed with oxygen therapy. It delivers a high concentration of oxygen and is used with a cannula to channel oxygen from the concentrator to the patient. This device may be used at home or institutions.

This device is expected to work for a period of 5 years. For a longer use, please consult your equipment provider and physician.

Availability of an alternate source of oxygen is recommended in case of power outage, or mechanical failure. Consult your equipment provider for type of back-up system recommended.

The device is not intended to be life sustaining and life supporting. Geriatric, pediatric, or any other patient unable to communicate discomfort while using this oxygen concentrator may require additional monitoring. Patients with hearing and/or sight impairments may need assistance with monitoring the alarms. If you feel discomfort, or are experiencing a medical emergency, seek medical assistance immediately.

Do not use oil, grease, or petroleum-based product on or near the OZ-1-08TM0 Oxygen Concentrator.

Do not use extension cords with this device or connect too many plugs into the same electrical outlet. This can result in an overload to the electrical panel causing the breaker/fuse to activate.

Use only voltage specified on back panel label.

Care should be taken to prevent the device from getting wet or allowing water to enter the device. This can cause the device to malfunction or shut down, and cause an increased risk for electric shock or burns.

No modification of this device is allowed.

This device should not be used adjacent to or stacked with other equipment.

It is very important to follow the prescribed oxygen flow. Do not increase or decrease the flow until you first consult your physician.

Ensure the device is operated in an upright position.

CAUTION

Position the device away from curtains or drapes, hot air or any heating devices. Be certain to place the device on a flat surface and make sure all sides are at least 1 foot (30 cm) away from a wall or other obstruction. Do not place the device in a confined area. Choose a dust-and-smoke-free area. Do not operate the unit outdoors. Avoid exposing it to direct sunlight.

CAUTION

To prevent a void of the warranty, follow all manufacturer's instructions.

CAUTION

The device releases warm air from the bottom of the machine, which can permanently discolor temperature sensitive flooring surfaces. The concentrator should not be used over flooring that is sensitive to hot air.

2. Description and Installation

CAUTION

Please check the Concentrator is in good condition when you receive the Concentrator.

1. Product Description

2. Preparation

When use it in the first time, please wash humidifier bottle with warm water and dry thoroughly, (refer to picture 1)


picture 1

Open the humidifier bottle cap and pour in distill or purified water to the level between the indications of MAX and MIN.
(refer to picture 2 and 3)


picture 2

Put the humidifier bottle onto the concentrator position in place. (refer to picture4)

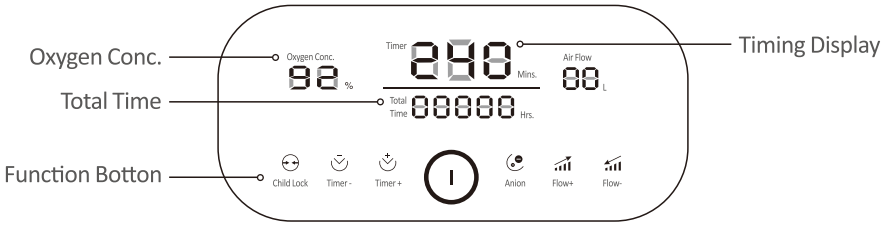

picture 3

Note: We recommend to use manufacturer's humidifier bottle, otherwise may cannot use with the machine, and suggest you to change water in every day and clean the bottle.


picture 4

3. Operating Instruction

1. Control Panel and Button Functions



(1)"On/Off "--- press "On/Off " button to switch on or off oxygen function

(2)"Timer + "--- press "Timer + " button to increase timing

(3)"Timer - "--- press "Timer - " button to reduce timing

(4)"Flow + "--- press "Flow + " button to increase air flow

(5)"Flow - "--- press "Flow - " button to reduce air flow

(6)"Anion"---press "Anion" button to turn on or off anion function

(7)"Child Lock"---press "Child Lock" button to turn on Child Lock function

After turn on Child Lock function, long press Child Lock to turn off this function.
(When turn on Child Lock function, others function will not working)

2. Oxygen Operation

(1) Connect the power cord, LCD display will light on. (Picture 5)

(2)Press "On/Off" button to switch on oxygen function, Continuous oxygen supply is the default,during running time, short press "On/Off" button can suspend oxygen function. (Picture 6)

(3)Press "Timer +" and "Timer -" to increase or reduce timing (Picture 7). The area of timing display shows the timer minutes, the area of total time shows the total runing time of machine.

(4)Press "Flow +" and "Flow -" to increase and reduce the air flow.(Picture 8)

(5) Connect nasal cannula to inhale oxygen .

(6) After finish using oxygen concentrator, press "On/Off" button to stop power supply, then take off nasal cannula from the device.

(7) Take out power cord, place oxygen concentrator in safe place for next use.

picture 5

picture 6

picture 7

picture 8

Warning
1. The device need to take 120s after switch on to reach the expected performance.
2. The capacity of oxygen flow and time of inhale oxygen, please follow the doctor's advice.
3. Patients with hyperthyroidism and other special population, please be sure to use under the guidance of the doctor.
4. Critically ill patients must be use under the supervision of the doctor.
5. Which oxygen capacity should be use for patients with severe lung disease, please consult physician.
6. This device is an ordinary oxygen product, not as a special first-aid equipment.
7. In casre of special reactions(such as discomfort) or unexpected conditions during use of this device, stop using it and consult a professional or doctor.
8. To use non-specified humidifiers or atomizing accessories may affect the performance of the product.

3. Atomization Operation

This device comes with atomization function, operation step as below:
(1)Rotate to remove the protection cap of atomizing port(Picture 9), attach atomized tube to the machine's atomized connector and connect the other end to the buttom of atomized cup. (Picture 10)


picture 9

(2)Pour in medical solution (max capacity 8ml). (Picture 11)


picture 10

(3)Connect atomized mouth or mask with atomized cup.(Picture 12)


picture 11

(4)Put atomized mouth into mouth or atomized mask onto face.(Picture13)


picture 12

(5) Press "On/Off " button to switch on atomizing function.

(6) After atomization, take off the tube from atomizing port of device, switch off the device, place oxygen concentrator in safe place for next use.


picture 13

Attention:
1. We cannot use oxygen and atomization in the same time.
2. Make sure atomized mouth, mask and medicine cup are clean before atomizing, or clean it before use.
3. Please follow the doctor's advice on the type, dosage and usage of atomized medicine, otherwise it may cause the worsening of symptoms.
4. Max capacity of medicine cup is 8 ml, do not add more than 8ml of liquid medicine.
5. Do not use any medicine in powder, suspension, or in high concentrations.
6. Keep atomizing parts at a distance from the eyes, because of some medicines may cause eyes damage during atomizing.
7. We suggest that atomizing time do not over 20 mins in every time.
8.The atomizing part which touch with person can only use with one person, to prevent cross infection.
9. Do not place or carry when there is medicine liquid in the atomizing cup.
10. Do not tilt the atomizing cup more than 45 °, and avoid violent shaking, otherwise medicine liquid sprinkling may cause inability to inhale prescribed doses.
11. We recommend to use the manufacturer's atomizing accessories to prevent affect its performance.

4. Cleaning, Care and Maintenance

Cannula Replacement

Your nasal cannula should be replaced on a regular basis. Consult your physician and /or equipment provider for replacement information. This cannula is recommended to ensure oxygen delivery.

Use of a cannula other than the one with this concentrator may restrict oxygen delivery.

Case Cleaning

You may clean the outside case using a cloth dampened with a mild liquid detergent and water.

Disconnect the power cord from electric outlet before you clean the device to prevent accidental electric shock and burn hazard. Only your equipment provider or a qualified service technician should remove the covers or service the device.

Do not use cleaning agents other than those specified in this user manual. Do not use alcohol, isopropyl alcohol, ethylene chloride or petroleum based cleaners on the cases or no the particle filters.

Humidifier Bottle Cleaning

Please follow the below instruction to clean the humidifier bottle.

(1) Make a liquor mixed with 1 part white vinegar and 3 parts warm water.
(2) Submerse the humidifier bottle into the liquor for 30 minutes.
(3) Take the humidifier bottle out and rinse it with clean water.
(4) Put it for air drying.

Note: If the Concentrator is intended not to be used for a long time, please empty the humidifier bottle and fix it back to the Concentrator after air drying. We suggest the humidifier bottle should be cleaned this way once every week.

Filter Replacement

The filter should be replaced every 6 months usually. If the air quality is bad, the filter will be contaminated very easily, thus the filter should be replaced more frequently than once every 6 months. Please check whether the filter is out of order before you replace it.

Nebulizing Kit Cleanning

Please use the same way to clean the nebulizing kit as used for the humidifier bottle. Before cleaning the kit, please disassemble the kit into every accessory.

Disposal of Equipment and Accessories

Please dispose off the replaceable parts properly as per the government disposal norms.

Warnings

1. Do not use this device where air contains corrosive, toxic, harmful (fumes) substances as this device takes air as raw material.

2. Please shut down the device and unplug the cord immediately when it is found not work properly.

3. This device is designed to serve for those with the ability to beathe on their own, and not intended to sustain and support life.

4. This device produces high concentration oxygen, which easily helps ignite flammable substances. There shall not within a radius of 1.5m from the oxygen outlet port so as to avoid any accident.

5. The use of this device in the rain or snow, or in a humid space is contraindicated. If the use of it in the aforesaid circumstances is not avoided, make sure the plug is connected to a reliably grounding outlet.

6. Make sure the plug is disconnected when the device is not in use.

7. Please cut off power before cleaning the equipment.

8. Do not disassemble and refer disassembly to equipment provider or a professional.
9. when the device is booted in temperatures below 10 degree C, it may emit great noise, but it is a normal case as the system needs to pre-heated in low temperatures.

10. Please make sure the tubing from humidifier bottle to user goes smoothly when the humidifier is used. Please make sure the tubing goes smoothly while shutting down the device at the end of oxygen therapy. The shutting down of the equipment is contraindicated while the tubing is blocked.

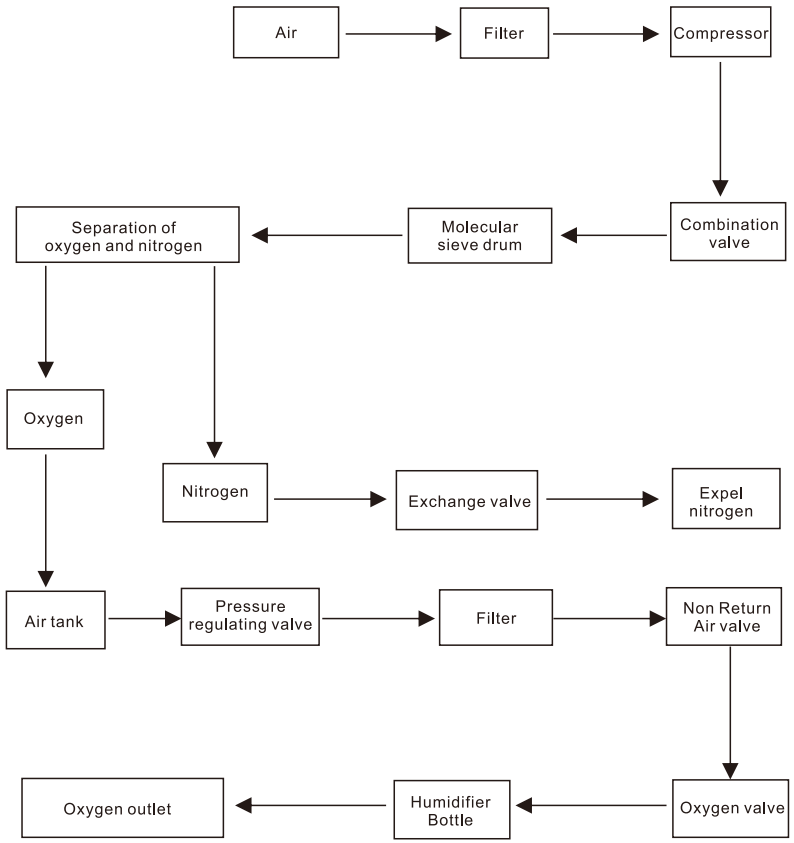
If continuous usage of this device is required while sleeping, seeking medical advice and direction is advisable. the parameters in this document are subject to chance without notice.

5. Product Specifications

Flow Specifications	1 LPM
Oxygen Concentration	90%+/-3%
Oxygen Output Pressure	30-60 Kpa
Power Consumption	200VA
Noise Level	≤ 60dB(A)
Dimensions	350mm*235mm*280mm
Weight	6.1KG
Operating Temperature	5 ˚C to 40 ˚C
The permissible environmental conditions for transport and storage	Temperature: -10°C to 40°C Humidity limitation: up to 80% RH Atmospheric pressure: 860 hPa to 1060 hPa
Rated Voltage/Frequency	AC 220V/50Hz

Operating out of these operational specifications can limit the concentrator’s ability to meet oxygen concentration specification at higher liter flow rates.

6.Gas path working chart



7.Accessories list

Listing number	Listing subsidiary	QTY	Expected service life	Note
1	Main engine of this product	1PCS	3 years	-
2	Operating instruction	1PCS	-	-
3	Qualification	1PCS	-	-
4	Warranty card	1PCS	-	Attached to the instruction manual
5	Humidifier Bottle	1PCS	-	Detachable parts
6	Filter Box	1PCS	3-6 months	

8. Troubleshooting

If your concentrator fails to operate properly, consult your equipment provider, and refer to the troubleshooting chart on the following pages for probable causes and solutions.

Do not attempt any maintenance other than the possible solutions listed below.

Problem	Probable Cause	Solution
Limited oxygen flow at a setting of high flow	Due to leakage from the humidifier bottle. Leakage, twisting or chocking of to the cannula.	Make sure the air flow is smooth.
Overheat	Indoor temperature is too high. Exhaust vent is blocked. Water in the humidifier bottle is hot.	Make sure unit is located in a well ventilated space and exhaust vent has not been blocked.
Fogs appear in the cannula	Too much water in the bottle. Unit is located in a poorly ventilated space, causing a high temperature. Unit crashes suddenly when in operation. Folding of tube will cause a unit to crash. Fan is disabled or runs slowly, causing a high temperature.	Fill cold water. Make sure water level is between MAX and MIN. Move unit to a well ventilated space. Stop and start again to eliminate fog Straighten the cannula. Consult your equipment provider to replace fan, or remove any hindrance next to the fan.

Problem	Probable Cause	Solution
Display shows information, but compressor and fan do not operate	Frequent starting and shutting down unit cause a crash. Main circuit board malfunctions.	Restart unit after 10 minutes. Consult your equipment provider to replace main circuit board.
Continuous beep, sounds and unit does not operate	The output plug is not connected properly.	Plug power cord tightly. Reconnect the output plug to another electrical outlet that works.
After starting the unit operates but display show nothing but messy codes	The electrical outlet gives no power. The power resetting switch breaks. Main control circuit malfunctions. Display board is not connected to power due to falloff of wires inside. Wires of display board are damaged. Display board malfunctions.	Press resetting switch. Consult your equipment provider to replace main circuit board.
Control buttons do not work	No response after buttons are pressed	Consult your equipment provider to do troubleshooting.

9. Symbol Descriptions

The following symbols may appear in this manual,on the concentrator or on it's accessories. Some of the symbols represent standards and compliances associated with the concentrator and its use. Applied part:

Graphics, symbol	Instructions	Graphics, symbol	Instructions
	Disconnect (general power supply)		Put through (general power supply)
	Type B applied part		Class II equipment
	Smoking is prohibited		Ban on fire
	Unauthorized personnel shall not remove the cover		Operating instructions
	Caution		Fragile, handle with care
	Avoid the sun		Upward
	Manufacturer		Limit of stacking layers: 4 layers
	Batch code		Date of manufacture
	Specifies serial number		Classification number
	Warning		Danger! High Voltage

10.EMC Declaration

Guidance and manufacturer's declaration-electromagnetic immunity

Guidance and manufacturer's declaration - electromagnetic emissions		
The "OZ-1-08TM0" is intended for use in the electromagnetic environment specified below, the customer or the user of the "OZ-1-08TM0" should ensure that it is used in such an environment		
Emissions test	**Compliance**	**Electromagnetic environment-guidance**
RF emissions CISPR 11	Group 1	The "OZ-1-08TM0" uses RF energy only for its internal function.Therefore,its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Group B	The "OZ-1-08TM0" is suitable for use in all establishment, including domestic establishment 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	Group A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Complies	

11. Electromagnetic Immunity

Guidance and manufacturer's declaration-electromagnetic immunity

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - Guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 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 fast transient /burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input / output lines	±2 kV for power supply lines	Main power quality should be similar to that of a typical commercial or hospital environment
Surge IEC 61000-4-5	±1 kV common mode ±2 kV differential mode	±1 kV common mode	Main power quality should be similar to that of a typical commercial or hospital environment
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5% U_T (>95% dip of U_T) for ½ cycle 40% U_T (60% dip of U_T) for 5 cycles 70% U_T (30% dip of U_T) for 25 cycles <5% U_T (>95% dip of U_T) for 5 s	<5% U_T (>95% dip of U_T) for ½ cycle 40% U_T (60% dip of U_T) for 5 cycles 70% U_T (30% dip of U_T) for 25 cycles <5% U_T (>95% dip of U_T) for 5 s	Main power quality should be similar to that of a typical commercial or hospital environment. When the user of the medical electrical equipment continued function also calls in the event of disruption of supply, it is recommended the concentrator from an uninterruptible power supply or a battery
Power frequency (50 Hz/60 Hz) magnetic field IEC 61000-4-8 Conducted RF IEC 61000-4-6	3 A /m 3 V eff 150 kHz to 80 MHz	3 A /m, 50Hz 3 V eff 150 kHz to 80 MHz	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment Portable and mobile RF communication equipment should be used no closer to any part of the nebulizer, 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 separation distance: d = 3,5/3 * SQRT (P) d = 3,5/3 * SQRT (P) 80 MHz to 800 MHz d = 7/3 * SQRT (P) 800 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 meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey should be less than the compliance level in each frequency range. Interference may occur in the vicinity of equipment marked with the following symbol: 

12. Recommended Separation Distances

for portable and mobile RF communication equipment and the concentrator.

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

Rated maximum output power of transmitter [**W**]	Separation distance according to frequency of transmitter in [m]		
	150 kHz to 80 MHz	80 MHz to 800 MHz	800 MHz to 2.5 GHz
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

Table 6 of DIN EN 60601-1-2:2007 (IEC 60601-1-2:2007)

1. U_T is the AC mains voltage prior to application of the test level.
2. Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy.

   To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the concentrator is used exceeds the applicable RF compliance level above, the concentrator should be observed to verify normal operation.

3. Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters [m] can be determined 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.

Note 1: At 80Hz and 800MHz, the higher frequency range applies

Note 2: These guidances may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

rev. july2017 2.0

RECORDING

TERMS AND CONDITIONS

1. Any defective part or assembly will be repaired or replaced at the sole discretion and determination of distributor, if the unit has been properly operated and used during the warranty period.
2. Repairs or replacements of parts under warranty will be carried out by the company or by our approved service dealers only.
3. Normal maintenance items and disposable components like cannula, humidity bottle, filters or mask accessories etc. are not covered by this warranty. All expenses incurred in shipping or collection the unit or its part, to and from the company /approved service dealer shall be paid by the purchaser.
4. This warranty does not apply to damages caused by customer usage of the product, or if the instrument is tampered with, modified or if and attempt is made to repair partially /fully by any unauthorized person /party.
5. This warranty will be null and void if the serial number on this product has been altered or removed /or if the purchaser fails to present the filled warranty card /Manual with which the item was purchased initially.
6. This warranty is null and void if the filters are not replaced on time and the machine is used with dirty choked filters /or water damage to the electronics of machine due to any type of negligence.
7. The customer is responsible for the supply of adequate stabilizer /UPS and input power for the machine. Any damages caused due to improper power supply voids the warranty.
8. Machine should be run in clean environment where the dust is minimal. Machine should be used without the thermo-cool or plastic covering around it so that to allow the air to circulate. Humidity bottle water should be changed daily for prolonged life of the unit.
9. The warranty extended is in lieu of all implied conditions and warranties under the law and is confined to repairs or replacement of the defective parts only and does not cover any consequential or resulting in any liability damaged or less. Furthermore, this warranty in no case shall extend to payment of any monetary consideration or replacement or return of the product as a whole.

Post
Stamp

Customer copy

WARRANTY CARD

Product Code :

Serial Number :

Bill Number : _____

Date of Purchase : _____

Dealer Stamp:

Company copy

WARRANTY CARD

Customer Name : _____

Product Code :

Serial Number :

Bill Number : _____

Date of Purchase : _____

Dealer Stamp:

Telephone: _____

E-mail: _____