

**GS-E1000**

**Extra oral Suction System**

**User Manual**

**Please read this user manual carefully before installing and operating this machine.**

- Thanks for purchasing our products.
- Before operating this machine, please read the user manual carefully and keep this user manual for future reference.
- Please follow the instructions strictly when operating, and make sure this machine is properly serviced and maintained.
- Instructions which are marked with  symbol should be read and executed carefully to avoid damaging the machine and injuring the operator or patient.
- If any problem occurs while operating, please contact the local distributor or manufacturer and technical support and help will be provided.
- When resolving errors, more detailed technical data will be provided.

# 1. Product Overview

## 1.1 Product Description

This extraoral suction system features new design, multifunction, and high quality. It can be used with dental units, suction unit and dental lights, it's movable design makes it very convenient for using in dental hospitals, dental clinics and for community dental treatments.

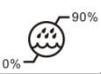
## 1.2 Field of Application

Assisting treatment for dental departments of medical institutions

## 1.3 Operating Life

5 years (depending on the life of the motor)

## 1.4 Symbols

Symbols	Meaning
	Trademark
	Attention! Please refer to the document
	Protective grounding
	AC voltage
	Keep the package dry
	This side up
	Hand with care
	Storage humidity
	Storage temperature
	Manufacturer
	Manufacturing date

## 2. Parts and Components

The extraoral suction system consists of motor, rotating arms, primary HEPA and activated carbon filter, secondary HEPA and activated carbon filter, plasma sterilizer, and disinfecting UV light. It is a standalone unit. Please refer to Diagram 1 for parts and names.



Diagram 1 Parts and Names

1. Suction hood	2. Rotating arm	3. Touch control panel
4. Handle	5. Casing	6. Swivel wheels
7. Lock	8. Fuse tube	9. On/Off Switch

### **3. Basic Technical Data**

#### 3.1 Technical data

3.1.1 Voltage: AC 110-240V 50/60Hz

3.1.2 Power: 1000VA

3.1.3 Control method: 2 level touch control

3.1.4 Fuse tube: T10AL 250V

3.1.5 Noise level:  $\leq 60$ db

3.1.6 Negative pressure air flow: 4000L/min

3.1.7 Filters: primary and secondary HEPA and activated carbon filters,  
filter efficiency  $>99.97\%$

3.1.8 Sterilization: Built-in UV and plasma sterilization

3.1.9 Rotating arm: universal rotating arm

3.1.10 Dimensions: 320x330x755mm

#### 3.2 Operating environment

3.2.1 Ambient temperature: 5-40°C

3.2.2 Relative humidity:  $\leq 80\%$

3.2.3 Atmospheric pressure: 86-106KPa

#### 3.3 Transportation and storage

3.3.1 Ambient temperature: -10-55°C

3.3.2 Relative humidity:  $\leq 90\%$

3.3.3 Atmospheric pressure: 50-106KPa

3.3.4 During transportation and storage please pay attention to this side  
up symbol and keep the package dry

### 3.4 Equipment safety category

3.4.1 Anti-electric shock level: Level I equipment

3.4.2 Anti-electric shock grade: Type B

## **4. Installation**

4.1 After unpacking, check if all the parts are ok, check if all the spare parts are included. Contact the distributor or manufacturer for any problems.

4.2 Put the machine on a flat, clean and dry floor.

4.3 Install the rotating arm

4.4 Install the suction hood

4.5 Connect the power cord to a power socket

## 5. Operations

### 5.1. Operating the machine

First, turn on the power, the machine will be in standby mode (the power indicator on the control panel lights up) and the suction system will be in standby mode. Press the POWER button on the control panel, the suction system panel will be in standby mode and the sterilization system starts working, press MIN on the control panel and the suction system will be operating at level 1 (standard negative pressure flow), press MAX on the control panel and the suction system will be operating at level 2 (maximum negative pressure flow), press the POWER on the control panel again and the suction system will be in standby mode.

### 5.2 Rotating arm

First, fix the wheels, and then insert the rotating arm into the plastic socket on the main unit. Rotate the main arm (rotating range is 360 degrees) to the desired direction and adjust the upper arm (rotating range is 180 degrees) to the desired position.

**NOTE: Do NOT rotate the rotating arm too quickly to avoid moving or falling.**

## 6. Cautions

### 6.1 Cautions

- The power cord should be properly grounded. 
- Clean the machine regularly, including cleaning the dust etc.
- When changing electronic parts, please unplug the power cord.
- Only trained personnel is allowed to operate this machine to avoid operation errors.
- Do NOT use this machine if it is considered to be a possible safety hazard to the patient or doctor.

### 6.2 Maintenance

- Please disconnect the power cord during maintenance or cleaning.



### 6.3 Environmental protection

- This machine does not contain any harmful substances, it can be handled or destroyed according to local regulations.

## **7. Maintenance**

### 7.1 UV light

The UV light needs to be cleaned and maintained every month, its life is 10,000 hours.

### 7.2 Plasma generator

The plasma generator needs to be cleaned and maintained every month, its life is 20,000 hours.

### 7.3 Changing the filters

The primary and secondary HEPA and activated carbon filter needs to be checked annually.

### 7.4 Changing the fuse tube

Use a screw driver to open the fuse tube socket, replace the fuse tube and put it back.

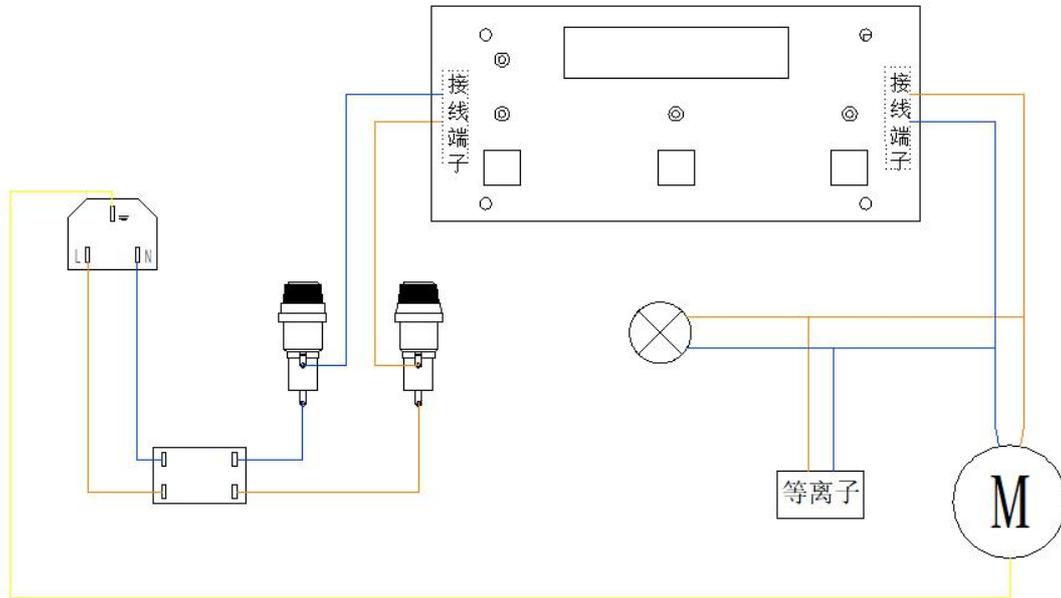
## 8. Troubleshooting

No.	Error	Cause	Check	Solution
1	No power	Power cord not connected	Check if the power cord is connected	Connect the power cord to the power socket
		Fuse tube is blown	Check if the fuse tube is blown	Replace fuse tube
2	The motor does not start	The power connector on the circuit board is disconnected or loosened	Check the connecting terminal and oilless air compressor connection	Connect the wires
		The temperature is too high for the motor	The temperature of the motor casing is too high	Disconnect the power for 2 hours and start again
3	The suction power is very low	Blockage of the filters	Check the filters	Turn off the power, open the machine and replace the filters

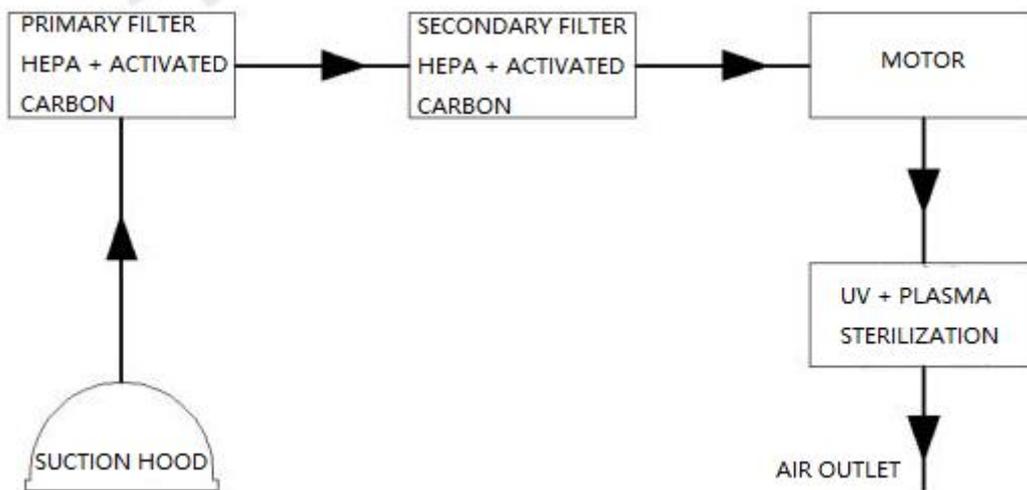
If problems persist after checking with the above methods, please contact the after sale service of the distributor or manufacturer. Inform them of the model number, serial number and the descriptions of the problems.

## 9. Diagrams

### 9.1 Circuit diagram



### 9.2 Air flow diagram



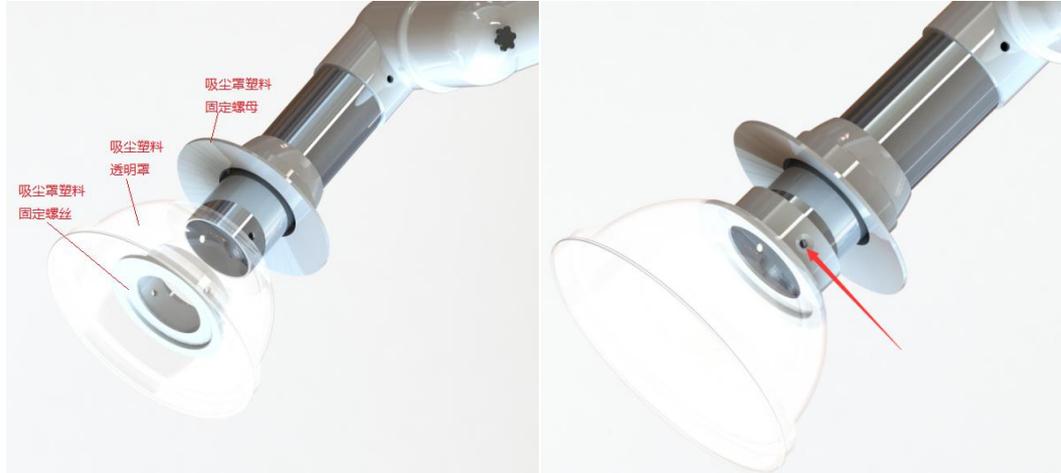
## 10. Packing list

NO.	Name	Quantity
1	Main unit	1PC
2	User manual	1PC
3	Quality certificate / Warranty card	1PC
4	Fuse tube T10AL 250V	2PC

5	Rotating arm	1SET
6	Suction hood	1PC

## 11. Appendix

### 11.1 Appendix 1. Suction hood installation



1. Connect the suction hood to the aluminum alloy rotating arm (refer to diagram 4)
2. Align the plastic suction hood screw with the rotating arm hole (refer to diagram 5)



DIAGRAM 6

DIAGRAM 7

3. Fix the plastic suction hood and the rotating arm with the M4 stainless steel screw, washer, spring washer and round nut. (refer to diagram 6)
4. Rotate the nut anti-clockwise until it's tightened. (refer to diagram 7)

## 11.2 Appendix 2 Rotating arm diagram

Rotating joint 1 can be rotated 360°

Rotating joint 2 can be rotated in one direction

Rotating joint 3 can be rotated 360°

Rotating joint 4 can be rotated 360° horizontally and 180° vertically  
(please refer to diagram 5)



## **12.Additional Note**

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