EOS Extraoral Suction System
Instructions For Use and Installation

P/N: 8027313 Version:A Date of Issue: 2020-05-06
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Disclaimer

Thank you for purchasing the ADS EOS Extraoral Suction System. The contents in this manual are related to your safety, legal rights and responsibilities. ADS retains the final right of this manual and other documents related to this product. Product design, technical specifications and all related documents are subject to update without prior notice. Please visit www.adsdental.com or www.adsequip.com for the latest product information.

Once you have used the EOS system, it is understood that you have read this disclaimer and warning carefully, understood, recognized and accepted all terms and contents. It is your responsibility for the proper use of the system and agree to these terms and any regulations, policies and guidelines established by ADS. Understanding and agreeing to the terms of this disclaimer will hold ADS harmless to all personal injuries, accidents, property damage and legal disputes.

Except as stated in the after-sales service policy, all materials and contents related to the product are provided "as things stand" without any express or implied warranty and condition.

ADS EOS Extraoral suction system, is a suction filtration piece of equipment, the system does not have an air disinfection function, it is NOT an air sterilizer. The EOS Extraoral suction system is designed to absorb aerosols and droplets coming out of the patient’s oral cavity to reduce the risk of infection to dentists, staff and patients. Proper precautions must still be taken to protect themselves and their patients.
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1 Product Introduction

The instructions contained within this manual should be thoroughly read and understood before operating the equipment. After the installation is completed, keep this manual in a safe place for future reference.

1. Intended Use of the Product

This product is intended for the use for removing aerosols, droplets, dust and pathogens produced during dental procedures to ensure a safe and clean surgery environment.

2. Product Standard Lifetime: 10 Years

2 Safety Precautions

⚠️ WARNING

• Do not use this product to absorb any substances other than aerosols, droplets, dust and pathogens during dental procedures.

• Do not use this product to take in water, organic solvents, Titanium powder or any solvent that are combustible. This could lead to safety accidents.

• Do not use this product to take in dirt, sand, rubbish, etc.

• Do not place this product anywhere near containers containing liquid, especially hot liquid, during use.

• Keep the power lines away from sharp objects to avoid scratching.

• Do not block suction outlets or exhaust outlets during use.

• Be sure to clean or replace the filter when clogged.

• The equipment should only be repaired by qualified technicians. Electric parts should only be installed by qualified technicians.

• Stop use immediately and contact your dental dealer when the product is damaged or operates abnormally.

• Do not look at UV lamps without using proper eye protection.

• Do not exposure skin under working UV lamp.
CAUTION

ADS will not be responsible when equipment damage or failure is caused by the below issues.

• The system is not installed, modified, or maintained by ADS designated operator.
• System damage or failure, is caused by products purchased from companies other than ADS authorized dealers.
• The system is installed, modified, or maintained using parts that are not authorized by ADS.
• Failure to observe the safety precautions and operation methods in the user instructions.
• Damage or failure as a result of a power surge or improper installation procedures.
• Fire or other nature disasters (earthquake, flood, thunder-strike, etc.)

Use this product with extreme caution on patients with a cardiac pacemaker or cardioverter defibrillator. In the case of any abnormalities in patients during use, immediately turn off this product and discontinue use. (The electromagnetic wave from the product may cause cardiac pacemaker or cardioverter defibrillator malfunctions.)

To avoid danger, pay attention to the list below.

1) The product should ONLY be operated or handled by dentists or by dental staff personnel under the supervision of a dentist.

2) Follow all installation instructions.

① Install in a dry place with no exposure to water.

② The environment should be free from possible hazards caused by pressure, temperature, humidity, ventilation, sunlight, dust, salt, Sulphur-containing air, etc.

③ Keep the system in a stable and balanced state. Avoid tilting inadvertently bumping the system when moving.

④ Never install the product anywhere exposed to chemicals or near chemical storage areas.

⑤ Be sure to connect to an appropriate power source. Pay attention to voltage and current.

⑥ Be sure to establish a proper grounding connection.
3) Before use
   ① Make sure the grounding connection is properly established.
   ② Make sure the electric wires are complete and properly connected.

4) During use
   ① Avoid continuous suction running of the equipment. The product is designed to be used on a per patient basis.
   ② Continuously monitor equipment and patient for any irregularities.
   ③ Discontinue use of the product immediately in case of any irregularities that may arise in the system or patient during use.
   ④ Patients should not be allowed to operate or handle the product.

5) After use
   ① Cut off the main power in the following order: press the start button, turn off the power switch, and disconnect the power cord.
   ② Disconnect from the receptacle to avoid the dragging the power cord.

6) Environment requirements
   ① The system should not be exposed to water.
   ② The system should be free from possible hazards caused by pressure, temperature, humidity, ventilation, sunlight, dust, salt, Sulphur-containing air, etc.
   ③ Avoid tilting, or the bumping of the system when moving.
   ④ Never expose the system to chemicals or place the it near a chemical storage area.
   ⑤ Clean and disinfect the system after every dental procedure.

7) Should a problem occur, please contact an ADS authorized dealers technical support team. Do not disassemble or attempt to repair.

8) Attempts at modifications are strictly forbidden.

9) In case of following situations, turn off the equipment and disengage the power cord from the wall receptacle.
   ① Before each filter replacement, equipment cleaning, maintaining, or repairing.
   ② Should any irregularities arise, such as heat and noise.
   ③ When the system is not in use for a period of time.
3 Product Structure

<table>
<thead>
<tr>
<th></th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8026695</td>
<td>Case Panel</td>
</tr>
<tr>
<td>2</td>
<td>8026722</td>
<td>Fine Filter</td>
</tr>
<tr>
<td>3</td>
<td>8026635</td>
<td>Motor</td>
</tr>
<tr>
<td>4</td>
<td>8026623</td>
<td>UV-C Light</td>
</tr>
<tr>
<td>5</td>
<td>8026563</td>
<td>HEPA filter</td>
</tr>
<tr>
<td>6</td>
<td>8027319</td>
<td>Transformer</td>
</tr>
<tr>
<td>7</td>
<td>8026605</td>
<td>Castor</td>
</tr>
<tr>
<td>8</td>
<td>8027343</td>
<td>Fuse 6GFU-F25A110V</td>
</tr>
<tr>
<td>9</td>
<td>8027340</td>
<td>Power cable</td>
</tr>
<tr>
<td>10</td>
<td>8026686</td>
<td>Case</td>
</tr>
<tr>
<td>11</td>
<td>8027316</td>
<td>Panel sticker</td>
</tr>
<tr>
<td>12</td>
<td>8026722</td>
<td>Handle</td>
</tr>
<tr>
<td>13</td>
<td>A121945</td>
<td>Suction Mouth Piece Hood</td>
</tr>
<tr>
<td>14</td>
<td>8026746</td>
<td>Suction arm of the third joint</td>
</tr>
<tr>
<td>15</td>
<td>A121944</td>
<td>The third joint</td>
</tr>
<tr>
<td>16</td>
<td>8026608</td>
<td>Noise filter stick</td>
</tr>
<tr>
<td>17</td>
<td>A121943</td>
<td>Suction arm of the second joint</td>
</tr>
<tr>
<td>18</td>
<td>A121942</td>
<td>The second joint</td>
</tr>
<tr>
<td>19</td>
<td>A121941</td>
<td>Suction arm of the first joint</td>
</tr>
<tr>
<td>20</td>
<td>A121940</td>
<td>The first joint</td>
</tr>
<tr>
<td>21</td>
<td>A121939</td>
<td>Centre Post of the first joint</td>
</tr>
</tbody>
</table>
# EOS Extraoral Suction System, Instructions For Use and Installation

## 4 Product Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>EOS Extraoral Suction System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>AC110V  60Hz</td>
</tr>
<tr>
<td>Electric current</td>
<td>12-20A</td>
</tr>
<tr>
<td>Power</td>
<td>1160W</td>
</tr>
<tr>
<td>Fuse wire</td>
<td>F25A 110V</td>
</tr>
<tr>
<td>Flow</td>
<td>105CFM</td>
</tr>
<tr>
<td>Suction Power</td>
<td>23KPa (10 Different Levels)</td>
</tr>
<tr>
<td>Fine Filter</td>
<td>F8</td>
</tr>
<tr>
<td>Average Efficiency (EM) for 0.4MM particles (%), 90&lt;EM&lt;95</td>
<td></td>
</tr>
<tr>
<td>Minimum efficiency* for 0.4MM particles (%), 55</td>
<td></td>
</tr>
<tr>
<td>(F8 matches European standard EN 779:2012 and ISO16890)</td>
<td></td>
</tr>
<tr>
<td>HEPA Filter Level</td>
<td>H14</td>
</tr>
<tr>
<td>H14, blocking virus and germs ≥0.3μm with 99.995% filtration efficiency (H14 matches European standard EN 1822:2009, ISO16890 and DOE-STD-3020-2015 Specification for HEPA Filters Used by DOE Contractors)</td>
<td></td>
</tr>
<tr>
<td>Noise Decibel</td>
<td>58dB (Tested under laboratory environment and 6-9 Inches distance from the suction mouth piece hood)</td>
</tr>
<tr>
<td>Suction Arm Caliber</td>
<td>Φ2”</td>
</tr>
</tbody>
</table>

### UV Light Specifications

<table>
<thead>
<tr>
<th>Type</th>
<th>UV-C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamp Tube Length</td>
<td>5.3”</td>
</tr>
<tr>
<td>Lamp Tube Caliber</td>
<td>0.6”</td>
</tr>
<tr>
<td>Lamp Cap Caliber</td>
<td>0.7”</td>
</tr>
<tr>
<td>Wave Length</td>
<td>254nm</td>
</tr>
<tr>
<td>Glass Tube</td>
<td>Ozone-free quartz glass</td>
</tr>
<tr>
<td>Power(W)</td>
<td>4W</td>
</tr>
<tr>
<td>Voltage (V)</td>
<td>30±15%</td>
</tr>
<tr>
<td>Electricity (mA)</td>
<td>145±15%</td>
</tr>
<tr>
<td>Radiation Intensity (μW/cm²)</td>
<td>≥8 @39.4”</td>
</tr>
<tr>
<td>Steady time (min)</td>
<td>5</td>
</tr>
<tr>
<td>Average Lifetime (h)</td>
<td>&gt;8000 (Continuous use)</td>
</tr>
<tr>
<td>Lamp Cap</td>
<td>G5 Aluminum head</td>
</tr>
<tr>
<td>Wire Material</td>
<td>Molybdenum Wire</td>
</tr>
<tr>
<td>Gas-filling</td>
<td>Pure Argon</td>
</tr>
<tr>
<td>Mercury</td>
<td>Pure Liquid Mercury&lt;15mg</td>
</tr>
</tbody>
</table>
4.1 Product Dimensions

Unit: inch
4.2 Product Package Size and Weight

<table>
<thead>
<tr>
<th></th>
<th>Suction arm</th>
<th>Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packing Size</td>
<td>27.2”x10.2”x9”</td>
<td>14.6”x14.2”x39.4”</td>
</tr>
<tr>
<td>Net Weight</td>
<td>3.2lbs</td>
<td>94.2lbs</td>
</tr>
<tr>
<td>Gross Weight</td>
<td>5lbs</td>
<td>98.6lbs</td>
</tr>
</tbody>
</table>

5 Product Installation

1. After unpacking, open the two door panels and remove the four fixed parts.

Warning:
If user does not take out the fixing parts to turn on the system, which will cause motor damage.
2. Affix the bottom of center post to the base cabinet with the screws provided. Place tube through the hose clamp and connect it to the center post. Then tighten the clamp.

3. Insert the mounting hole of the first joint into the center post. Make sure the thumb screw is aligned with the center pillar groove. Then tighten the screw.

Caution: Please install the suction arm from the end with a spring.
3. Insert the mouthpiece tube into the mounting hole of the third joint. Make sure the thumb screw is aligned with the center pillar groove. Tighten the screw.

6 Product Use

6.1 Warnings During Use

• Do not allow any person or object, to inadvertently make contact with the system during operation.

• Avoid exposing the product to any source of light or heat, either before, during or after use.

• To avoid possible bumping or tilting, do not place objects on the cabinet base or near office furniture.

• Never disassemble the joint cups before or during use. This could lead to possible accidents or failure.

• Do not tilt the equipment. Otherwise it could lead to personnel injuries.

• If the equipment is found in a tilted state, do not move the equipment horizontally or attempt to take hold of the equipment by its arms or suction hood.

• Remove the power cord from the wall receptacle before moving the equipment.
Place the product on level ground

Move by handles

Handle
6.2 Preparation.

- Connect the 3 Prong Power Cord to the wall receptacle for 110V 20A power supply.
6.3 Turn On the Power

- Remove anything that might be inadvertently sucked in to the system.
- Make sure the suction tubes are installed properly.
- Press the “Power” button to turn the equipment on.

6.4 Start and Stop

- Make sure the suction mouth piece hood and arms are in the right position. Keep a distance of 4 Inches between suction mouth piece hood and patient’s mouth. Press the “Start/Stop” button to let the equipment start working.
  
- Press “Plus” and “Minus” button to adjust suction velocity.

There are 10 power levels you can choose from.
- To end or pause, press the “Start/Stop” button once. Press it again to restart.

**Suggestion:** After each dental treatment, keep the equipment running for an extra few minutes to remove possible aerosols, droplets, dust and pathogens remaining in the air.
6.5 Operation Principle

The EOS system collects aerosols, droplets, dust and pathogens produced during routine dental procedures through a suction mouthpiece hood, aerosols and droplets are collected into a well sealed metal box which is including a F8 fine filter, motor, UVC light and a H14 HEPA filter. Particulate matter is filtrated by the F8 fine filter. The HEPA filter captures particles down to 0.3 microns with 99.995% efficiency. Clean dry air is exhausted from the top of the cabinet.

The UVC lights are positioned on the HEPA filter and kills any remaining bacteria and viruses captured by the HEPA filter and are exhausted from the cabinet base.

When the suction stops, the UVC light continually stays on for 30 minutes killing viruses, pathogens and bacteria.

6.6 Suction Arm Operation

- The rotating parts of the first joint center post ① is limited in its rotation. Therefore, it cannot rotate more than 360 degrees.
- The first joint ② is limited in rotation. Therefore, the first suction tube cannot be bent backward.
- The second and third joints ③④ are not limited in rotation.
- Please operate and position suction tubes within their designed rotation limits.

Caution:
After use, restore suction tubes to their original position to avoid collisions.
7 Parts Cleaning and Replacement

• When installing or removing the suction mouth piece hood, hold it by the connecting end, instead of by the far end.
• To clean the equipment surface, use a disinfectant wipe and dry with a soft cloth.
• ADS recommends to use VIROS OPTIM1 hydrogen peroxide disinfectant.

7.1 Suction mouth piece hood

[Daily Clean] Use wiping disinfectant or spray disinfectant to clean the product surface.
ADS recommends to use VIROS OPTIM1 hydrogen peroxide disinfectant.

[Replacement]
• The suction mouthpiece hood is autoclavable.
• Turn off the power and remove power cord.
• Keep your hands Dry.
• Wear gloves.
• Loosen up the three screws in the suction mouth piece hood.
• Replace with a new hood and tighten up the screws.
7.2 Suction Arms

[Daily Clean]
• Use a spray disinfectant or wipes to clean the system's surface.
• To internally clean the system, turn it on to its lowest suction level, spray VIROS OPTIM1 hydrogen peroxide disinfectant into the suction tubes and let the system run for 3 minutes.
• Caution: Do not disassemble the suction arms and soak them in a disinfectant.

[Replacement]
• Turn off the power and remove power cord from wall.
• Keep your hands dry.
• Wear gloves.
• Loosen up the screws in the first suction tube.
• Remove the entire suction tube and replace it with a new arm.
• Tighten up the screws.

[Caution]
Replace suction tubes.
Dispose of as medical waste.
### 7.3 Noise Filter Stick Replacement

(replace time: 12 months)
- Cut off the main power and remove power cord.
- Keep your hands dry.
- Wear gloves.

**[Caution]** Replaced the noise filter stick and dispose of as medical waste.

1. Loosen up the screws in the third joint and take out the noise filter stick.
2. Place a new noise filter stick into the second suction arm.
3. Insert the module of the third joint into the second suction tube. Tighten up the screws.

### 7.4 Fine Filter Replacement

(replace time: 6 months)
- Turn off the main power and remove power cord from wall receptacle.
- Keep your hands dry.
- Wear gloves.

**[Caution]** Replaced filters should be disposed of as medical waste.

1. Loosen up the screws on door panel using a slot (flat head) type screwdriver. Remove the door panel.
2. Unlock the dust-proof drawer cabinet, press the cover plate and remove the filter.
3. Use a standard garbage bag to remove and dispose of the used fine filter as medical waste.
4. Replace a new filter into the drawer.
5. Replace the cover plate and reinstall the door panel.
6. Replace particle/dust filter every 6 months.
7.5 HEPA Filter Replacement

( replace time :12 months )

The lifetime of the HEPA filter is 12 months. When the equipment is powered on, the percentage of filter’s remaining lifetime will be shown on the panel. However, the filter’s lifetime may vary in different operational environments. When system senses insufficient negative pressure, a buzzing sound from the panel, or blinking indicator light, indicates a replacement is necessary.

- Turn off the system power and remove powercord from the wall.
- Keep your hands dry.
- Wear gloves.
  ① Remove the door panel.
  ② Unlock the dust-proof cabinet drawer and press the cover plate.
  ③ Remove the filter box.
  ④ Replace the HEPA filter.
  ⑤ Use a standard garbage bag to lift it from the device base and dispose of used HEPA filter as medical waste.
  ⑥ Replace the filter box, replace the cover plate. Double check and lock.
  ⑦ Reinstall the door panel.

⚠️ [Caution] Replaced filters should be disposed of as medical waste.

[Caution] Make sure the HEPA filter is placed

[Caution] After replacing the HEPA filter, press and hold the Reset Button for 5 seconds until a buzzing sound appears and lasts for 3 seconds. The alarm will stop.
7.6 UV –C Light Replacement

• Turn off the systems power and remove powercord from wall.
• Keep your hands dry.
• Wear gloves.

1. Remove door panel.
2. Unlock the dust-proof cabinet drawer and replace the cover plate.
3. Remove the filter box.
4. Turn over the filter box, making sure not to damage the face of the HEPA filter.
5. Remove the UVC light tube and replace it with a new one, dispose of the two as medical waste.
6. Remove the filter box and put the cover plate back on. Double check and lock.
7. Reinstall the door panel.

[Caution] Replacement UV –C Light should be disposed of as medical waste.

[WARNING!]

• Do not look at UV lamps without using proper eye protection.

• At all times wear gloves when handling UV lamps and quartz sleeves, as oils from skin will decrease UV energy transmission once the lamp is heated and may lead to premature failure.
7.7 Fuse Replacement

- Turn off power switch, remove power cord.
- Keep your hands dry.
  ① Remove power cord from wall.
  ② Open the cradle cover using a Philips screwdriver as instructed on fuse cradle.
  ③ Replace with a new fuse (6GFU-F25A250V)
  ④ Reinstall the cradle cover.
  ⑤ Plug in the power cable.
  ⑥ Turn on the power to continue operation.

8 Daily Maintenance

To ensure a clean daily use, the mouthpiece hood should be cleaned frequently.
- To disinfect suction tubes, use VIROS OPTIM1 hydrogen peroxide disinfectant spray.
- To disinfect suction hood, avoid using disinfectant liquid that may change the shape or color of the hood.

8.1 Maintenance Period of Equipment Parts

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before Each Business Day</td>
<td>Check equipment surfaces and parts for any irregularities</td>
</tr>
<tr>
<td>On a Per Patient Basis</td>
<td>Suction hood Disinfection and Arms for interior Disinfection</td>
</tr>
<tr>
<td>After Each Business Day</td>
<td>Clean the equipment</td>
</tr>
<tr>
<td>Every 6 Months</td>
<td>Fine filter replacement</td>
</tr>
<tr>
<td>Every 12 Months</td>
<td>HEPA Filter Replacement</td>
</tr>
<tr>
<td>Every 12 Months</td>
<td>Noise filter stick replacement</td>
</tr>
</tbody>
</table>
9  Transportation and Storage Conditions

- Ambient temperature: $-50^\circ F$ to $104^\circ F$.
- Relative humidity: 30% to 75%, avoid moisture condensations.
- Big steam pressure range: 500 hPa to 1060 hPa.

10  Trouble Shooting

| No Power | Is the power-on in the power socket?  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Is the button switch turned on?</td>
</tr>
<tr>
<td></td>
<td>Is the powercord plugged into the wall receptacle?</td>
</tr>
<tr>
<td></td>
<td>Is the fuse blown?</td>
</tr>
<tr>
<td></td>
<td>Is there a fuse?</td>
</tr>
</tbody>
</table>

| The suction arm demonstrates low level of suction power. | Is the noise filter stick clogged?  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Is the HEPA filter clogged?</td>
</tr>
<tr>
<td></td>
<td>Is the cover plate in place?</td>
</tr>
</tbody>
</table>

If all your answers to these questions are “yes” yet the equipment still runs poorly, please reach out to ADS Customer Services.

11  Warranty and Customer Services

- The EOS Extraoral suction system comes with 2-year parts warranty from the date of purchase. Should you need to service your system, please contact the local dealer authorized by ADS.
- Email: sales@adsequip.com Tel: 626-6200456
- Technical Support: 800 488 9708

12  Consumables

① Noise Filter Stick (8026722)  
② HEPA Filter (8026563)  
③ Fuse (8027343)  
④ Fine Filter (8026725)  
⑤ Suction mouth piece hood (8026740)
13 Electro Magnetic Compatibility

Caution:
- Extraoral Suction System meets the requirements of standard YY0505.
- Users should install and operate the product based on the electromagnetic compatibility information in the document.
- Portable and mobile radio frequency communication devices may affect the performance of Extraoral Suction System. Keep mobile phones, microwave ovens, etc. away from the equipment during use.
- Refer to attachment for manufacturer's statement.

Warning:
- Do not place the Extraoral Suction System in the vicinity of another device, nor should the equipment be stacked up. If it must be in the vicinity of other devices or stacked, be sure to test and observe that the equipment can run under current configuration.
- For the Extraoral Suction System, use cables that are authorized by ADS only. Attempt to use cable or other components from unauthorized source could lead to electromagnetic irregularities.

<table>
<thead>
<tr>
<th>Statement of Manufacturer—Electromagnetic Launch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraoral Suction System is designed for electro magnetic environment described below. Be sure to apply.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Launch Test</th>
<th>Compliance</th>
<th>Electromagnetic Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>GB4824RF Lauch</td>
<td>1 Group</td>
<td>Extraoral Suction System utilizes RF energy for its built-in functions only. Therefore, its RF transmit is very low. There is a low possibility that the equipment will affect other electronic devices in its vicinity.</td>
</tr>
<tr>
<td>GB 4824RF Lauch</td>
<td>B Class</td>
<td></td>
</tr>
<tr>
<td>GB 17625.1 Harmonic Lauch</td>
<td>A Class</td>
<td>Extraoral Suction System is suitable for all facilities, including household facilities, and can be directly connected to low-voltage public residential power supply.</td>
</tr>
<tr>
<td>Voltage Fluctuation</td>
<td>Qualified</td>
<td></td>
</tr>
<tr>
<td>/Scintillation Lauch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GB 17625.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Statement of Manufacturer— Electromagnetic Immunity

Extraoral Suction System is designed for electromagnetic environment described below. Be sure to apply.

<table>
<thead>
<tr>
<th>Electromagnetic Immunity Test</th>
<th>IEC6061 Test Level</th>
<th>Test Level Conformance</th>
<th>Electromagnetic Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrostatic Launch (ESD) GB/T 17626.2</td>
<td>±6 kV Contact Discharge ±8 kV Air Discharge</td>
<td>±6 contact Discharge ±8 kV Air Discharge</td>
<td>The floor should be of wood, concrete, or tile. If the floor is covered by synthetic materials, the relative humidity should be at least 30%.</td>
</tr>
<tr>
<td>Electrical Fast Transient Burst GB/T 17626.4</td>
<td>±2 kV to power wire</td>
<td>±2 kV to power wire</td>
<td>The power supply should reach the standard of typical commercial or hospital power supply.</td>
</tr>
<tr>
<td>Surge GB/T 17626.5</td>
<td>±1 kV wire to wire ±2 kV ground to ground</td>
<td>±1 kV wire to wire ±2 kV ground to ground</td>
<td>The power supply should reach the standard of typical commercial or hospital power supply.</td>
</tr>
<tr>
<td>Voltage sags, short interruptions and voltage changes in power input line GB/T 17626.11</td>
<td>(&lt; 5% U_t) lasting 0.5 Cycle (At U_t &gt; 95% Sag) 40 %U_t, lasting 5 Cycles (At U_t, 60% Sag) 70% U_t, lasting 25 Cycles (At U_t, 30% Sag) (&lt; 5% U_t), lasting 5s (At U_t &gt; 95% Sag)</td>
<td>(&lt; 5% U_t) lasting 0.5 Cycle (At U_t &gt; 95% Sag) 40 %U_t, lasting 5 cycles (At U_t, 60% Sag) 70% U_t, lasting 25 cycles (At U_t, 30% Sag) (&lt; 5% U_t), lasting 5s (At U_t &gt; 95% Sag)</td>
<td>The power supply should reach the standard of typical commercial or hospital power supply. If required to use the equipment during power blackout, it is recommended to use battery or uninterruptible power supply.</td>
</tr>
<tr>
<td>Power Frequency Magnetic Field (50/60 Hz) GB/T 17626.8</td>
<td>3 A/m</td>
<td>3 A/m</td>
<td>Power frequency magnetic field should be at the same level with PFMF in typical commercial or hospital environment.</td>
</tr>
</tbody>
</table>

Note: \(U_t\) refers to the AC network voltage before the test.
Statement of Manufacturer—Electromagnetic Immunity

Extraoral Suction System is designed for electromagnetic environment described below. Be sure to apply.

<table>
<thead>
<tr>
<th>Electromagnetic Immunity Test</th>
<th>IEC6061 Test Level</th>
<th>Test Level Conformance</th>
<th>Electromagnetic Environment</th>
</tr>
</thead>
</table>
| RadioFrequency Conduction GB/T 17626.2 Radio  | 3V(Effective Value) 150kHz ~ 80MHz                  | 3V (Effective Value) / 3V/m                                               | The isolation distance between portable and mobile RF communications devices and any part of the Extraoral Dentistry Suction System, including cables, should not be less than recommended isolation distance. The recommended isolation distance is calculated by a formula corresponding to the frequency of the transmitter. Recommended isolation distance formula:  
  
  $$d = 1.2\sqrt{\frac{P}{Z}}$$  
  
  $$d = 1.2\sqrt{\frac{P}{Z}}$$  
  
  $$d = 1.2\sqrt{\frac{P}{Z}}$$  
  
  $$d = 1.2\sqrt{\frac{P}{Z}}$$  
  
  Where:  
  
  - $P$—based on the transmitter’s maximum rated output power provided by the transmitter manufacturer, in watts (W);  
  - $d$—Recommended isolation distance, in meters (m).  
  
  The field strength of the fixed RF transmitter is determined by surveying the electromagnetic field, and in each frequency range it should be lower than the compliance level. Interference may occur near the equipment marked with the following symbol. |
| Frequency Radiation GB/T 17626.3               | 3V/m80MHz ~ 5GHz                                      |                                                                      |                                                                                             |

Note 1: At 80MHz and 800MHz frequencies, apply higher frequency band formula. Note 2: These guidelines may not be suitable for all situations. Electromagnetic propagation is affected by absorption and reflection from buildings, objects and human bodies.

The field strengths of fixed transmitters, such as: base stations for wireless (cellular/cordless) phones and terrestrial mobile radios, amateur radios, AM and FM radio broadcasts, and television broadcasts, cannot be accurately predicted theoretically. To assess the electromagnetic environment of fixed RF transmitters, surveys of electromagnetic sites should be considered. If the measured field strength of the Extraoral Suction System is higher than the applicable RF compliance level above, the Extraoral Suction System should be observed to verify that it can operate normally. If abnormal performance is observed, supplementary measures may be necessary, such as reorienting or repositioning the Extraoral Suction System. In the entire frequency range of 150kHz to 80MHz, the field strength should be lower than 3V/m.
**Recommended isolation distance between portable and mobile RF communication devices and Extraoral Suction System**

Extraoral Suction System are intended for use in electromagnetic environments where RF radiation disturbances are controlled. Depending on the maximum rated output power of the communication device, the purchaser or user can prevent electromagnetic interference by maintaining the minimum isolation distance between portable and mobile RF communication devices (transmitters) and Extraoral Suction System as recommended below.

<table>
<thead>
<tr>
<th>Transmitter’s rated maximum output power</th>
<th>Isolation distance corresponding to different frequencies of the transmitter/m</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>150kHz~80MHz</td>
</tr>
<tr>
<td></td>
<td>$1.2\sqrt{P}$</td>
</tr>
<tr>
<td>0.01</td>
<td>0.12</td>
</tr>
<tr>
<td>0.1</td>
<td>0.38</td>
</tr>
<tr>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>10</td>
<td>3.8</td>
</tr>
<tr>
<td>100</td>
<td>12</td>
</tr>
</tbody>
</table>

For the maximum rated output power of the transmitter not listed in the table above, the recommended isolation distance $d$ is in meters (m), which can be determined by the formula in the corresponding transmitter frequency column, where $P$ is the Maximum rated output power of the unit, in watts (W), provided by the transmitter manufacturer. Note 1: At 80MHz and 800MHz frequency points, the formula of the higher frequency band is applied. Note 2: These guidelines may not be suitable for all situations. Electromagnetic propagation is affected by absorption and reflection from buildings, objects and human bodies.
## 14. Symbols Descriptions

<table>
<thead>
<tr>
<th>Symbols</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="handle_with_care.png" alt="Handle with Care" /></td>
<td>Handle with Care</td>
</tr>
<tr>
<td><img src="keep_dry.png" alt="Keep Dry" /></td>
<td>Keep Dry</td>
</tr>
<tr>
<td><img src="more_information.png" alt="More Information" /></td>
<td>More Information</td>
</tr>
<tr>
<td><img src="serial_number.png" alt="Serial Number" /></td>
<td>Serial Number</td>
</tr>
<tr>
<td><img src="grounding_connection.png" alt="Grounding Connection" /></td>
<td>Grounding Connection</td>
</tr>
<tr>
<td><img src="this_way_up.png" alt="This Way Up" /></td>
<td>This Way Up</td>
</tr>
<tr>
<td><img src="caution.png" alt="Caution" /></td>
<td>Caution</td>
</tr>
<tr>
<td><img src="type_b_machine.png" alt="Type B Machine" /></td>
<td>Type B Machine</td>
</tr>
<tr>
<td><img src="power_switch.png" alt="Power Switch" /></td>
<td>Power Switch</td>
</tr>
<tr>
<td><img src="start_stop.png" alt="Start/Stop" /></td>
<td>Start/Stop</td>
</tr>
<tr>
<td><img src="gear_up.png" alt="Gear Up" /></td>
<td>Gear Up</td>
</tr>
<tr>
<td><img src="gear_down.png" alt="Gear Down" /></td>
<td>Gear Down</td>
</tr>
<tr>
<td><img src="uv_light.png" alt="UV Light" /></td>
<td>UV Light</td>
</tr>
</tbody>
</table>
Extraoral Suction System

Model: EOS Extraoral Suction System
Service life: 10 years
Input Voltage: AC110V 60Hz
Power: 1160VA
Max air flow rate: 105CFM

ADS DENTAL SYSTEM INC.
Add: 1590 S MILLEK AVE, UNIT A ONTARIO, CALIFORNIA, 91761, USA
Manufactured by: Guangzhou Ajax Medical Equipment Co., Ltd.
Add: Building No. 2, Dagang Industrial Zone, Shilou Town,
Panyu District, Guangzhou, P.R. China

2020-03 SN E2000001