1. Description of Products

This product is a comprehensive control equipment of dental electric motor, utilizing precise electric motor as the primary drive. This product has the following features: Free of regular maintenance, micro-vibration and low noise, ease of operation, and easy to use. Simply connected with standard four-hole connector, you can use the original or improved control system with different speed-increasing and decreasing handpiece to complete most of the clinical therapy.

2. Technical Data

<table>
<thead>
<tr>
<th>Brushless electric motor</th>
<th>Motor control box</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage: DC 12V</td>
<td>Voltage: 100-240V AC</td>
</tr>
<tr>
<td>Current: 1.6A</td>
<td>Current: 0.8A rms</td>
</tr>
<tr>
<td>Frequency: 50Hz</td>
<td>Frequency: 50Hz</td>
</tr>
<tr>
<td>Max. Torque: 4.5N.m</td>
<td>Max. Torque: 4.5N.m</td>
</tr>
<tr>
<td>Min. Speed: 2000 ± 10% (RPM)</td>
<td>Min. Speed: 2000 ± 10% (RPM)</td>
</tr>
<tr>
<td>Max. Speed: 40000 ± 10% (RPM)</td>
<td>Max. Speed: 40000 ± 10% (RPM)</td>
</tr>
</tbody>
</table>

3. Product Assembly

**3.3 Product Assembly**

**STEP1** Illustrated by connecting turbine hose connector

1. Finishing the connection of turbine hose connector

**STEP2** Illustrated by connecting AC adapter connector

1. Finishing the connection of AC adapter connector

**STEP3** Illustrated by connecting / disconnecting the motor and the motor cord

1. Finishing the connection of motor and motor cord

**STEP4** Finishing the power cord

1. Insert the power cord plug into the inlet of AC adapter completely.

4. Operation Instructions

**4.1 Setting the speed range**

**Type of handpiece**

- Button for adjusting the speed

**Push the SELECT switch to adjust the type of handpiece**

- The SELECT button is functional only by the motor in static condition

**4.2 Speed Control Switches**

Set the speed of the motor.
4. Operation Instructions

**STEP 1**: Select Rotation for Forward / Reverse

**Indication lamp of rotation direction**

Light on for the selected rotation

**STEP 4**: Instruction of memory setting

Please set the option of ON or OFF at least 1 minute to allow the unit to store the settings that you desire.

**STEP 5**: Instruction of memory setting

Light off for the selected mode

Description of Button

- Light Long press to set speed
- Light press to set speed
- Light on for the speed set

**6. Troubleshooting**

**Error Code**

- E1: High load
- E3: Overheat Error
- E7: Motor cord wire breakdown or internal circuit malfunction
- E9: Gas, water or electricity tube are mistakenly connected

**7. Maintenance**

**Overhaul and Adjustment**

- The device automatically checks the operation of the control unit and detects any errors. If an error occurs while the power is on and checked whether the same error code is displayed. If the same error code is displayed, please take action by referring to the instructions provided in the column of 'Error Code'.

**8. General Principles and warranty.**

**General Principles**

The product should be performed in a felt position to avoid the working area being irresistible. Health and accident prevention, as well as the protection of the user and others. According to the above requirements, the operation should be performed in a suitable environment.

- Use only part performance in the products. Where the occurrence of abnormal operation, excessive vibration, or other types of abnormal operation, shall immediately stop operating, and check the cause or call the technical personnel to detect and determine the abnormal cause.
- Must ensure that the device only by its design purpose, and all the equipment in correct and proper condition, and all the equipment are in correct and proper condition. The above requirements shall only be met when the correct use and maintenance of the products, otherwise, please turn on the power again and check whether the same error code is displayed. If the same error code is displayed, please take action by referring to the instructions provided in the column of 'Error Code'.

**9. Warnings**

**Guidelines and manufacturer's declaration – electromagnetic interference emissions**

This product is not intended for use in the general commercial or hospital environments. Customers who use the product should ensure that operating in an appropriate environment.

- **Guidelines**
  - The user should take all necessary actions to ensure the system is not exposed to adverse electromagnetic interference.
  - The product should be set up and operated in a normal manner to the way they should be used.

- **Manufacturer’s declaration**
  - The manufacturer of the device does not guarantee that the device will not be affected by electromagnetic interference. The user is responsible for ensuring that the device is not affected by electromagnetic interference.

**Precautions for medical device and Electromagnetic Compatibility (EMC)**

This product is intended for use in the electromagnetic environment. Customers who use the product should ensure that operating in an appropriate environment.

- **General purposes**
  - The products described in this section are intended for medical purposes only. The products are not intended for use in any的方式.

- **Certain equipment**
  - The products described in this section are intended for medical purposes only. The products are not intended for use in any方式.

- **Immunity test**
  - The products described in this section are intended for medical purposes only. The products are not intended for use in any方式.

- **Product information**
  - The products described in this section are intended for medical purposes only. The products are not intended for use in any方式.

**Power currency (50/60Hz)**

- **UT (60% dips, at UT)**
  - The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage). The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage).

- **Voltage variation**
  - The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage). The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage).

- **Immunity test**
  - The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage). The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage).

**Warnings**

- **Interfaces**
  - The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage). The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage).

- **Detailed information**
  - The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage). The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage).

- **Information**
  - The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage). The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage).

**Environmental conditions**

- **Temperature**
  - The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage). The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage).

- **Humidity**
  - The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage). The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage).

- **Vibration**
  - The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage). The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage).

- **Electrostatic discharge (ESD)**
  - The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage). The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage).

- **Power supply**
  - The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage). The product is not designed to operate under voltage fluctuations (±50% of the nominal voltage).

**10. Warnings**

- **Guidelines and manufacturer’s declaration – electromagnetic interference emissions**
  - The product is not intended for use in the general commercial or hospital environments. Customers who use the product should ensure that operating in an appropriate environment.

- **Guidelines**
  - The product is not intended for use in the general commercial or hospital environments. Customers who use the product should ensure that operating in an appropriate environment.

- **Manufacturer’s declaration**
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**Precautions for medical device and Electromagnetic Compatibility (EMC)**

This product is intended for use in the electromagnetic environment. Customers who use the product should ensure that operating in an appropriate environment.

- **General principles**
  - The product is not intended for use in the general commercial or hospital environments. Customers who use the product should ensure that operating in an appropriate environment.

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