

# Instructions for use

ELEEC

SG200L / SG200

# Symbols



Warning



Manufacturer



Authorized representative in the European Community



Do not dispose of with domestic waste



Sterilization of 135°C



Humidity limitation  
: 10%R.H. ~ 95%R.H.



Consult instruction for use



Keep away from rain



Handle with care



Thermo fisher disinfectable



Atmospheric pressure limitation  
: 500hPa–1060hPa



Temperature limit : -40°C ~ +70°C

# Contents.

3	Chapter 1. Outline
4	Chapter 2. Safety Information
5	Chapter 3. Description of Product
10	Chapter 4. How to Use
14	Chapter 5. Maintenance
16	Chapter 6. Failure
17	Chapter 7. After-Sales Service
18	Chapter 8. Disposal

# Chapter 1. Outline

**Purposes of use**      This device is an electric dental handpiece to be used connected to a motor for operating dental implants.

**Operators**      This device should be used only by dentists with relevant medical license.

**Matters to be considered before use**      1) This manual should be understood before use of the device.  
2) This device should be used only for the purposes the device is originally designed.

## Chapter 2. Safety Information

### Warning

- 1) The angle or rotary instrument part should not be assembled or disassembled while being operated.
- 2) The rotary instrument which is bent, damaged, modified or not in accord with ISO standard should not be used.  
When the damaged one is used, the device can be broken or pop up, which can cause injury to the operator.
- 3) Rotating speed regulated by the manufacturer should conform. If the handpiece is irregularly operated while being run, the use of the device should immediately be stopped and contact the seller for its repair.
- 4) The Push Button should not be clicked while the device is being operated. Otherwise, that action can get the rotary instrument to be detached and cause overload of the button.
- 5) It should be careful that the angle should not be contacted with soft tissue inside the mouth.  
Its strong torque can cause danger of burns.
- 6) If standard operation time is exceeded, it can cause danger of burns. The standard operation time of the device (after operation for 2 minutes, stop for 15 minutes) should be followed.
- 7) If there are injuries inside the mouth, the device should not be used because decayed matters can be into the injured parts and cause embolism.
- 8) Glass can be damaged and light transmission can be decreased, so sharp tools should not be used to clean the optical parts.

## Chapter 2. Safety Information

### Caution

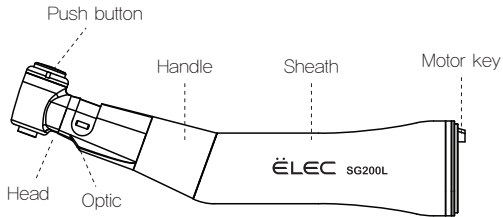
- 1) This manual should be understood before use of the device.
- 2) Before use, it should be checked that the rotary instrument is connected to the home correctly and whether the angle is regularly operated through test run.
- 3) The rotary instrument being operated should not be touched.
- 4) While the device is being operated, protective gloves should be put on for safety and prevention of injuries
- 5) It should be careful not to drop the device. Physical shock can cause malfunction of the device.

### Notice

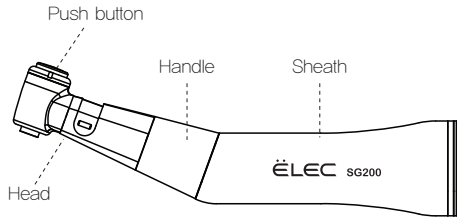
- 1) In case of failure of the device which is caused by users' negligence, its warranty will be voided.
- 2) The body of the handpiece represents a mounting part.

# Chapter 3. Description of Product

## Components



SG200L(optic)



SG200(non-optic)

# Chapter 3. Description of Product

## Components



spray nozzle



spray clip



tube clip



Y-coupling



spray adaptor



## Chapter 3. Description of Product

### Specification

Model	SG200	SG200L
Reduction ratio	20:1	
Chuck Type	Push button	
Size	20(D) x95(L)	
Weight	73g	
Rotating speed of motor	40,000rpm (Max.)	
Rotating speed of handpiece	2,000rpm (Max.)	
Fiber Optic	X	O
Irrigation	O(External)	
Coolant volume	≥50ml/min	
Coupling(ISO3964)	Type 1	Type 4
Rotary Instrument(ISO1797)	Type 1	

## Chapter 3. Description of Product

### Temperature

- Maximum temperature of handpiece: 48°C

Standard operation time of the device: after operation for a maximum of 2 minutes, stop for a minimum of 15 minutes

### Environmental conditions (storage, transfer, operation)

#### 1) Storage conditions

Temperature: -40°C ~ +70°C

Humidity: 10 ~ 95%

Air pressure: 500hPa ~ 1060hPa

#### 2) Transfer conditions

Temperature: -40°C ~ +70°C

Humidity: 10 ~ 95%

Air pressure: 500hPa ~ 1060hPa

#### 3) Operation conditions

Temperature: +10°C ~ +35°C

Humidity: 30 ~ 80%

Air pressure: 700~1060 hPa

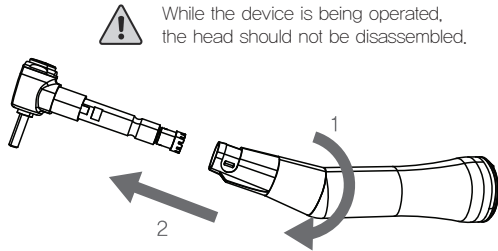
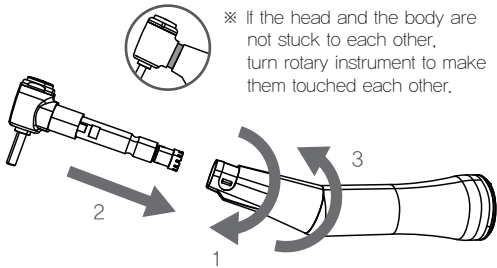


#### Caution ►

When the device is operated out of designated environmental conditions, it can cause the device to malfunction.

## Chapter 4. How to Use

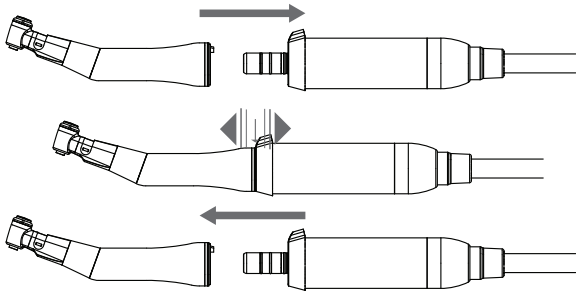
### Assemble and disassemble



## Chapter 4. How to Use

### Connection and disconnection of motor

- 1) Push the handpiece to the motor horizontally and completely stick it to the motor.
- 2) Check whether the handpiece is connected to the home of the motor by turning it to the left and right.
- 3) Pull the handpiece horizontally to disconnect it from the motor.

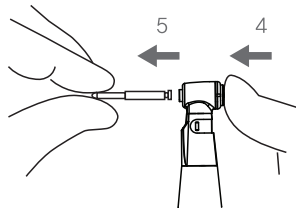
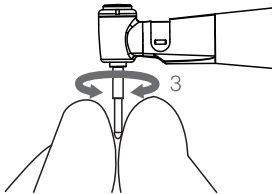
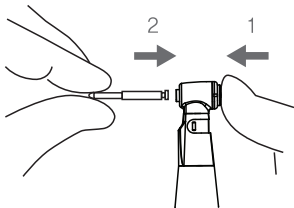


While the device is being operated, the handpiece should not be disassembled.

## Chapter 4. How to Use

### Assemble of rotary instrument

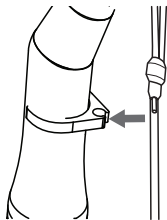
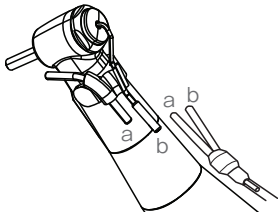
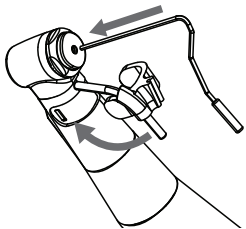
- 1) Insert the rotary instrument by clicking the Push button.
- 2) Check whether the rotary instrument is completely connected by turning the device to the right and left.
- 3) Disconnect the rotary instrument by clicking the Push button and pulling the device.



## Chapter 4. How to Use

### Installation of Irrigation system

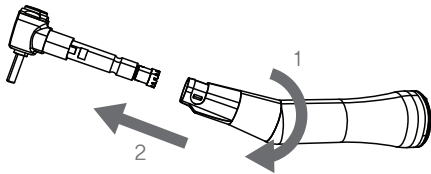
- 1) Install the spray nozzle and spray clip to the head part of the handpiece.
- 2) Connect the irrigation tube to the spray nozzle and spray clip by using a Y-coupling
- 3) Fix the irrigation tubes to the handpiece by employing a tube clip.



## Chapter 5. Maintenance

### Cleaning

- 1) Disconnect the head attached to the angle as shown in the figure on the right.
- 2) Put the angle head in cleaner around for 1 minute and wipe it lightly.
- 3) Put the angle head in the ultra-wave washer with distilled water and rinse it around for 30 seconds to 1 minute.
- 4) Wipe the entire surface of the angle and angle head with cloth or a brush wet with isopropyl alcohol to remove foreign materials around for 2 minutes, and dry them.
- 5) Clean the angle by following all this process whenever foreign materials are discovered.
- 6) Wipe the entrance and exit of the optic wet with cotton swab to eliminate pollutants and oil.



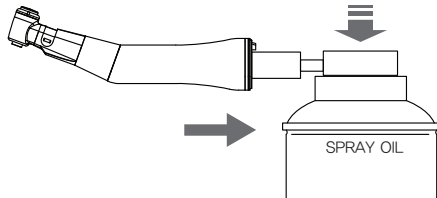
### WARNING

- It is not allowed to apply sharp tools to wipe the device and its parts. Otherwise, it can cause damage to optic, which can be led to decrease brightness of light.
- It is prohibited to use strong acid liquid or sterilized solution to wipe or clean the device.

## Chapter 5. Maintenance

### Lubrication

- 1) Lubricate the parts where lubricants can be supplied by using a spray adaptor.
- 2) Lubrication cycle
  - After every cleaning of the inner parts
  - Before every sterilization
  - After use, 30 minutes after use or at least twice a day



### Sterilization

It should be sterilized after the handpiece and rotary instrument, irrigation system are completely disconnected. Recommended parameters for sterilization verified by the manufacture is as follows.

Cycle type	Temperature	Exposure time	Drying time
Pre-Vacuum	135°C (275°F)	18 minutes	30 minutes
Gravity displacement	135°C (275°F)	10 minutes	30 minutes



After the completion of sterilization, it should be checked whether the device is completely dried.



## Chapter 6. Failure

### Explanation on failure

When there are some problems, matters shown in the Tab. below should be checked first before you contact the seller. If there is no relevant explanation below or problems are not solved even after the troubleshooting suggested does not solve your issues, there can be failure considered in your device so you should contact the seller.

Condition of failure	Causes of failure	Troubleshooting
No enough power in handpiece	When the rotary instrument is connected to the angle wrong	Unwind the rotary instrument and tighten it correctly.
	When the rotary instrument is bent or modified	Replace the rotary instrument with a new one.
	When the angle has foreign materials on its surface	Clean the angle or replace it with a new one.
	When torque values or rpm values are lower than the settings, caused by the product with a defective angle	Replace the angle with a new one.
	When the rotary instrument is stuck to the angle, so the rotary instrument is not able to turn	Separate the rotary instrument from the angle. Clean the rotary instrument or replace it with a new one.

## Chapter 7. After-Sales Service

### After sales service

Manufacturer : MICRO-NX Co., Ltd.

Country of manufacturer : Republic of Korea

Address : 22, Maeye-ro 1-gil, Dong-gu, Daegu, 41059, Republic of Korea

Contact: +82-53-650-1000 ([www.micronx.co.kr](http://www.micronx.co.kr))

### Warranty

Warranty period of the product: 12 months



#### Caution ►

In case of failure of the device which is caused by users' negligence, its warranty will be voided.

## Chapter 8. Disposal

### Disposal procedure



#### 1) Disposal of handpiece

- When it comes to disposal of electric equipment used, related laws, standards and guidelines of relevant countries should be obeyed.
- When the product is discarded, it should be careful that pollution is not caused.

#### 2) Disposal of packaging

- All kinds of packing materials can be disposed in an environmentally-friendly way or recycled.
- For prevention of waste production and recommendation of re-use of materials, please send the packaging to a company specializing in collecting and recycling used materials.



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