# Ultrasonic Scaler Operation Manual

TR-CS-C Fiber

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# 1.Symbols

1.1Device ID



A: Attention! Please refer to the instructions before use

B: Application Part Type (According to Standard EN-60601-1)

C: II class device

# 2. Equipment Parts

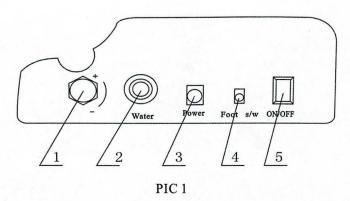
- 1. Main Unit 2. Pipes 3. Footswitch 4. Transformers
- 5. Working tip 6. handpiece

#### 3.Installation

In order to install clearly, do please according to following operation.

-water supply: with a source pressure between 15-72psl (2-5kgf/cm<sup>2</sup>)

-electrical supply of DC 24V, 1.7A (from transformer output) The rear structure diagram of equipment



- 1. water regulation 2. water intake 3. power socket
- 4. foot switch power switch 5. Power Switch

#### Connect to water supply

- -connect the water hose to the water supply by T connector
- -connect the other end to the nipple joint at the back of the unit (See PIC1)

#### Connection of foot switch

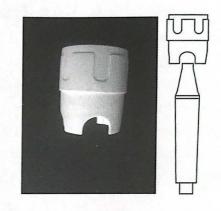
-Connect the plug of foot switch to the socket at the back of the unit. (See PIC1)

# Connect to the power supply

- \*\*WARNING: Always the connect power supply voltage must be used.
- -connect the transformer to socket at the back of unit. (see PIC1)
- -Supply voltage to transformer: AC100-240V, 50-60Hz
- -Supply voltage to unit: DC 24V, 1.7A

# Connection of the handpiece

- -Screw the tip onto the handpiece with torque wrench.
- -Tighten the tip.
- -connect the handpiece to handpiece-cord and place it on holder



# 4. Cleaning & Maintenance

#### Tip & Handpiece

\*\*Caution: Tip & Handpiece can be damaged by dropping in the movement.

Do not clean the handpiece in an ultrasonic cleaner.

Do not use chemical solvents, abrasive cleaner.

Tips must be sterilized in autoclave before every use.

#### Handpiece cord

The cord can be cleaned with a cloth soaked in any of the common non-abrasive mild cleaning liquids containing alcohol.

Dry the handpiece connector with compressed air before connecting the handpiece.

# External casing, Foot switch, Transformer

These can be cleaned with a cloth soaked in any common non-abrasive mild cleaning liquids containing alcohol.

#### 5.Instruction For Use

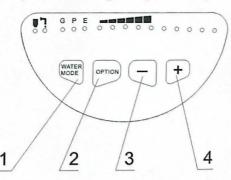
- \*\*Note before use
- -Use only the own tip.
- -To prevent bio-contamination, Tips & Handpiece must be sterilized in autoclave before use or reuse.
- -Make sure tighten connection between tip with handpiece.
- -Tips must be sterilized into autoclave.
- -Please do not use the product near strong magnetic field.

#### Use Step:

1. Select a suitable tip for each use, and tighten it onto the handpiece with torque wrench.

#### \*Caution: There is the possibility of getting hurt by the sharp edge of tip.

- 2. Connect the handpiece to handpiece-cord of unit.
- 3. Push the Power ON/OFF button to turn on. When power on, all functional key indicator lights turned on, start into working condition. Function key as PIC 2. (Please donot step onto the footswitch when pressing the key of "WATER MODE" or "OPTION")



PIC 2

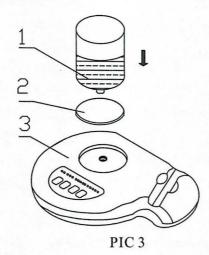
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4. Select the level of power (ultrasonic intensity) using +/- button. Ultrasonic scaler has 10 degree of ultrasonic intensity level. The handpiece does not have a heating protection mechanism. A fine spray is sufficient to cool the Point of friction between the tip and the tooth.

1: water mode button 2: G/P/E option button 3: intensity decrease button

4: intensity increase button

#### 5. Water bottle installation as PIC 3



1: Water bottle 2: dust cap 3: Main Unit

Open the dust cap, and put the water bottle into the main unit.

# 6. Technical Specifications

#### Classification

Type of protection against electric shock: Degree of protection against electric shock: Degree of protection against harmful ingress of water:

Method of sterilization of disinfection: Degree of safety of application in presence of a Flammable anesthetic mixture:

Mode of operation: CSA S. NO. 125

Conditions for use:

Storage and transport conditions:

Specifications of unit

Model: YS-CS-A(B1)/YS-CS-A(V1)

Supply voltage: DC 24V, 1.7A

Class II, with transformer Applied part type B Unit Ip40 Transformer Ip20 See chapter 4. Cleaning & Maintenance Unit is unsuitable for use in presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide. Continuous operation Risk class 2 +10°C 至+40°C 30%-75% relative humidity

10%-95% relative humidity 500hPa-1060hPa

+10°C 至+40°C

Ultrasonic output characteristics:

Maximum output power with load:

8W Frequency: 25-35kHZ 1-5 Bar

Transformer:

Input: AC 100-240V, 50-60Hz

Output: DC 24V

0.05-0.15mm,

no less than 0.5N

Main vibration offset: Semi-offset force:

Use Step:

1. Select a suitable tip for each use, and tighten it onto the handpiece with torque wrench.

\*Caution: There is the possibility of getting hurt by the sharp edge of tip.

#### 7. Common Problems and Solutions.

- 1. When the power switch turned on, scaler does not work.
- 1) Check the power cord is fully connected to the supply-side or device side
- -Connect the power cord properly
- 2) Check whether the voltage using according to equipment requirements.
- -Use the equipment voltage requirement.
- 2. The power switch display in good condition, but the device does not work.
- 1) Check foot switch if fully connected to the device or the rear inlet.
- -Connect the foot switch safely.

- 3. The power switch display in good condition, but the device does not work.
- 1) Working tip is not installed tight-remove the tip of work and re-tighten the working tip.
- 2) Working tip is distorted. -To replace a new one.
- 3) Working tip is worn. -Replace a new one
- 4)The handpeice doesn't connect to the handpiece -connect the handpeice with the tube
- 5) The electric wire of handpiece is broken, and electricity leakage
- -Turn off the power switch, cut off the transformer. Contact dealer or our company
- 6)The handpiece is broken-replace a new one
- 4. Intensity is not enough.
- 1) The connection of working tip is not correct-remove the working tip, and connect again.
- 2) The working tip is broken-replace a new tip
- 3) The working tip wear off. -replace a new one.

#### 8. Statement:

- 1)Product maintenance is only operated by our company or appointed agent.
- 2) The Company may, upon the purchaser's requirement, offer the maintenance of circuit diagram, and components lists, technical documents, etc.

# 9. Environmental Protection

After the expiration of product life, do not arbitrarily discarded, please deal with it follow the local laws and regulations.