

Ultrasonic Piezo Surgery

Sonic Surgeon 310L



Key Features

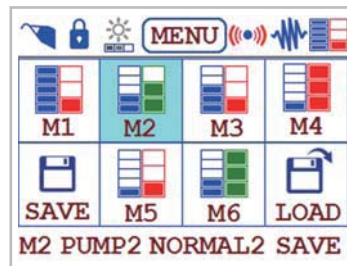
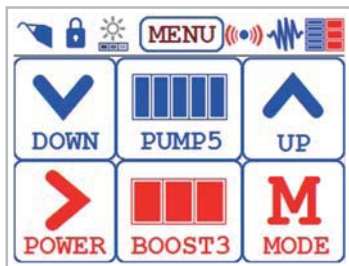
:: Model selection according to Handpiece power



Sonic Surgeon 310L (40W)

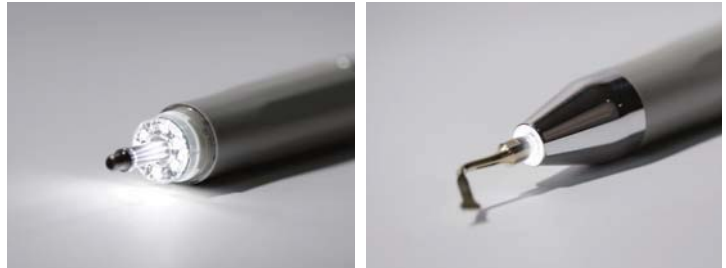
:: Color touch LCD

:: Memory function



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03

:: Optic Handpiece with Hexa-LED



:: Optimized Handpiece and Tips



:: One-touch pump cover-simple to set and arrange



Product Features

■ Features

High Handpiece power of 60W

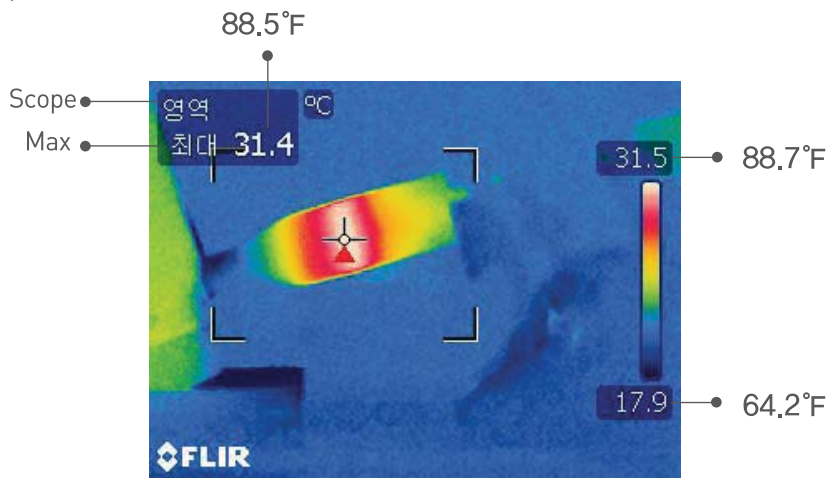
By implementing the world's top-level output, Sonic Surgeon 600L has widened the application scope of operation and decreased operation time.

Piezoelectric effect element based on DIT's own piezo technology

Based on DIT's own piezo technology, which is the core of ultrasonic operation unit, Sonic Surgeon series produces more stable and optimized output.

Optimized design of Handpiece and Tip

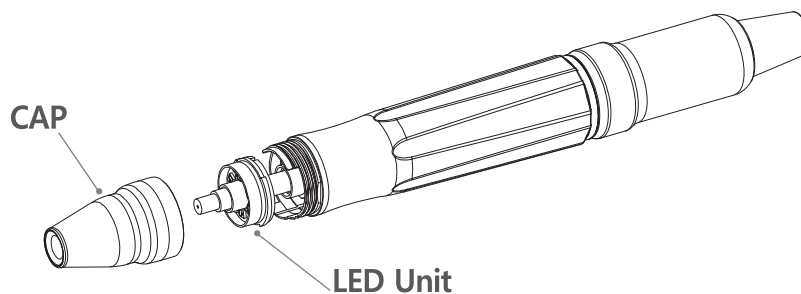
Design based on vibration analysis enables optimized handpiece and tip to increase durability and efficiency. With more stable and effective vibration, Sonic Surgeon series mitigates inconvenience from heat of handpiece during surgical operation.



※ The above maximum temperature can be different, depending on measurement condition.

Separable Handpiece cap and Replaceable LED unit

Separable handpiece cap is easy to clean internal contaminants, which minimizes concerns about infection. LED unit is replaceable, which makes maintenance cost-saving.



Optic Handpiece with Hexa-LED

Illuminated handpiece with Lux Hexa-LED lighten the treatment site and secures more precise and broader eyesight.

Touch LCD application

3.2" Touch LCD has improved visibility and convenience in user interface

Memory function

The memory function of output power and water supply provides convenience of each control.

Diverse tip application including patented tip

Safer and more convenient sinus operation is possible with the patented crestal approach (socket lift) tip. 19 different tips are applicable for various dental surgeries.

Multifunctionally and Ergonomically designed Foot Switch

The multifunction switch controls on/off of the hand piece, delivery rate of the water pump and ultrasonic power. The slim design prevents foot fatigue even during long operation.

Improved Safety for patients

- Self-diagnostic Function

This function prevent accidents by automatically detecting abnormal state of handpiece, pump and untied tip. In abnormal cases, Sonic Surgeon 600L automatically stops operating with an error message.

- Auto cooling Function

After power switch is on, water is supplied for 10 seconds without tip vibration in order to prevent bone heating.

■ Application

Implant Surgery

- Ridge expansion
- Sinus Lift
 - Crestal approach(Socket lift)
 - Lateral window open
- Harvesting bone chip
- Implant site preparation
- Block bone tech.



Oral Surgery

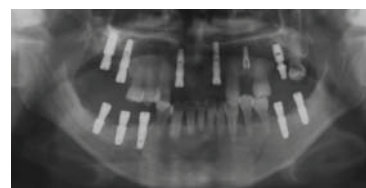
- Extract

Periodontal Surgery

Maxillofacial Surgery

Scaling

Orthodontics



Product Components

※ Product composition can be changed according to customers' needs and circumstances.

Generator Unit

Stylish exterior design

Maximized water supply

Max. water supply of 100ml/min minimizes bone heating.



Sonic Surgeon310L

Handpiece

Stable output

Handpiece designed by DIT's own piezo technology produces more stable and optimized output. This handpiece can be easily separated for cleaning.



600L Optic Handpiece



310L Optic Handpiece



310L Non-Optic Handpiece

Foot Switch

Multifunction switch

The multifunction switch controls on/off of the hand piece, delivery rate of the water pump and ultrasonic power.

Ergonomic design

The ergonomic design prevents foot fatigue during long operation.



Torque Wrench

(Consumable)

Torque wrench is used to tighten a tip to a handpiece. With slip function, torque wrench prevents excessive force exertion to a handpiece.



Tip ● (Consumable)

Crestal approach patented tip

Sinus operation can be administered more safely and conveniently.

Diverse tip applications of 19 types

Various dental operations, such as sinus lift, ridge expansion, bone harvesting, window open and block bone, are possible.



Sterilization Tray ●

The large-size sterilization tray disinfects dental tools including handpiece, torque wrench and tips at once.



Aluminum Case ●

Aluminum case can be stored and moved easily and safely



Saline Solution Tube ●

Saline solution tube for connection to peristaltic pump and handpiece.



Tip Application

*() : Model name in blankets is only for Sonic Surgeon 600L.

Tips for dedicated Sonic Surgeon 600L are not compatible with Sonic Surgeon 310L.

Standard Tip

● DG3-001 / (BTG-B017)



● DG3-002 / (BTG-R018)



Features

- The specially processed and coated diamond tip has more grinding ability and durability than a conventional one.

Application

- Window open tech
- Implant site preparation

Setting

- Power : Normal 3
- Water : 3

● DM3-003 / (BTM-D019)



Application

- For sinus membrane desquamation

Setting

- Power : Normal 3
- Water : 1

● DE3-004 / (BTE-K020)



Application

- Ridge expansion tech
- Extraction of remaining teeth

Setting

- Power : Normal 3
- Water : 3

● DH6-005 / (BTH-S021)



Features

- The special metal coating improves durability.

Application

- Bone harvest
- Implant site

Setting

- Power : boost 3
- Water : 1

*() : Model name in blankets is only for Sonic Surgeon 600L.

Tips for dedicated Sonic Surgeon 600L are not compatible with Sonic Surgeon 310L.

Special Tip

● DD6- 028i (BTD-F023)



Features

- The tip for sinus membrane lift by hydraulic pressure enables bone drilling and graft without motor engine even on the residual bone of 5mm or more.
- Head Diameter : 2.8mm (Internal infusion)
- Depth Gauge : 4, 6, 8, 10, 12mm line marking

Application

- Socket lift tech (Crestal approach)

Setting

- Power : Boost 3
- Water : 5



● DD6-016 (BTD-F022)



Features

- The specially processed head has more drilling ability and durability than those of a conventional diamond tip.
- Head Diameter: 1.6mm
- Depth Gauge: 4, 6, 8, 10, 12mm line marking

Application

- Window open tech

Setting

- Power : Boost 3
- Water : 3



● DC6-SAW (BTC-I024)



Features

- Additional lateral saw blade enables more effective cutting.
- Depth Gauge: 4, 6, 8, 10, 12mm line marking

Application

- Window open tech
- Ridge expansion tech
- Block bone tech

Setting

- Power : Boost 3
- Water : 3



● DC6-SAW L.R (BTC-I025) L (BTC-I026) R



Features

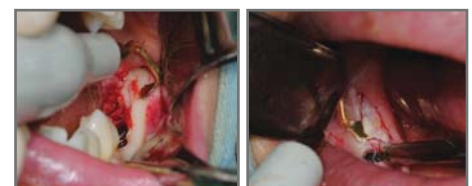
- Additional lateral saw blade enables more effective cutting.
- This product is used in areas that are difficult to be reached by a general saw.

Application

- Ridge expansion tech
- Block bone tech

Setting

- Power : Boost 3
- Water : 3



Optional tips(sold separately)

The below optional tips can be usable with sonic Surgeon 310L & Sonic Surgeon 300.
Tips for dedicated Sonic Surgeon 600L are not compatible with Sonic Surgeon 310L.

Drilling tip (Φ2.4)

● DD6-024i



Application • Socket lift tech.
(Crestal approach)

Setting • Power : Boost 3
• Water : 5

Bone Harvesting tip

● BTH-R009



Application • Only for Bone Harvesting
(Rectangular Type)

Setting • Power : Boost 3
• Water : 1

Scaling tip

● BTS-P010



Application • Only for Scaling
(Anterior teeth)

Setting • Power : Normal 1
• Water : 2

● BTS-P011



Application • Only for Scaling
(Molar teeth)

Setting • Power : Normal 1
• Water : 2

Perio tip

● BTP-P012



Application • Only for Perio
(Anterior teeth)

Setting • Power : Normal 1
• Water : 2

● BTP-P013



Application • Only for Perio
(Molar teeth);
Left bending

Setting • Power : Normal 1
• Water : 2

● BTP-P014



Application • Only for Perio
(Molar teeth);
Right bending

Setting • Power : Normal 1
• Water : 2

● BTP-P015



Application • Only for Perio
(Furcation root face);
Left bending

Setting • Power : Normal 1
• Water : 2

● BTP-P016



Application • Only for Perio
(Furcation root face);
Right bending

Setting • Power : Normal 1
• Water : 2

Product Specification



Ultrasonic Piezo Surgery Sonic Surgeon 310L

Category		Specifications
Device in accordance with Directive 93/42/EEC		Class II b.
Class according to EN 60601-1		Class I Type B
Device for intermittent operation		60" ON 30" OFF
Input	Voltage	AC 100 ~ 240V
	Current	AC Max 2A
	Frequency	50 / 60 Hz
Ultrasonic	Operation Frequency	26 ± 3KHz
Delivery rate of the peristaltic pump		Adjustable via keypad 5 delivery rates 10 to approx. 100ml / min
Ambient Temperature	Transportation & storage	-10°C to 70°C (14°F to 158°F)
	Operation	10°C to 40°C (50°F to 104°F)
Relative Humidity	Transportation & storage	10% to 95%
	Operation	30% to 75%

Global Network

