

# BERYLAS BLUE DENTAL LASER SYSTEM

Innovative | Efficient | Versatile | Accurate







# **Professional Dental Diode Laser Equipment**

The Berylas manufactured by Dimed is an innovative and effective dental diode laser with best wavelengths and power. Thanks to the advanced technique and high quality, Berylas performs excellently in soft-tissue surgeries, periodontics, endodontics, teeth whitening and other oral treatment.



## **Ergonomic handle**

Designed for easy mobility and portability

- Convenient finger switch for true portability
- Easy replacement for different tips





# **Friendly Design For Dentists**

The Berylas is easy to use with the advanced software and smart guidance, which brings more convenience for the dentists.

## **Easy To Use Preset Protocols**

Berylas offers preset protocols for the most common dental laser treatment and users can complete the steps by few clicks.

# Multiple Wavelengths And Power Selection

You can select the optional wavelengths and power you need for all kinds of indications in dental laser treatment.

# Create Individual Settings And Save Favorites

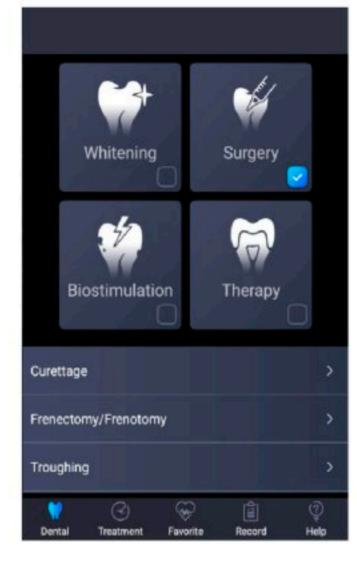
The customized creation and saves of specific requirements can be achieved for the purpose of accessing them directly and working more efficiently.

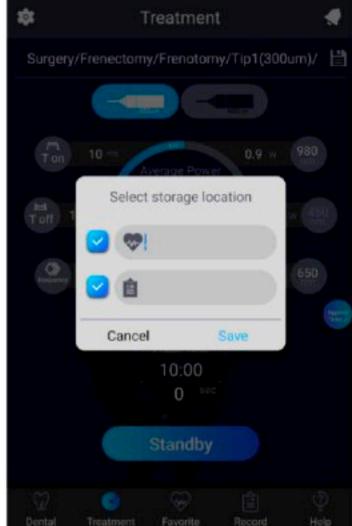
### Treatment Record

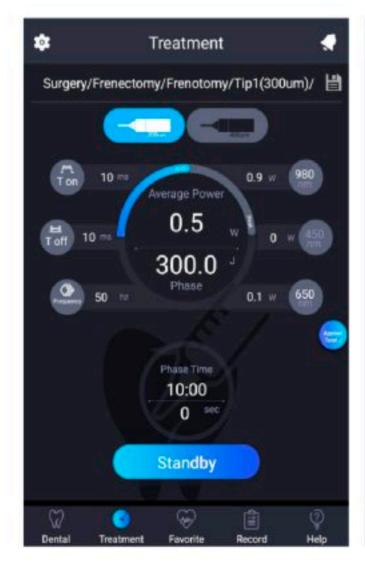
The patient name, date, application and exact parameters of every treatment can be saved and researched.

# Self-learning By Android System

You can review the user manual, operating insturctions and updated videos by the Help icon.



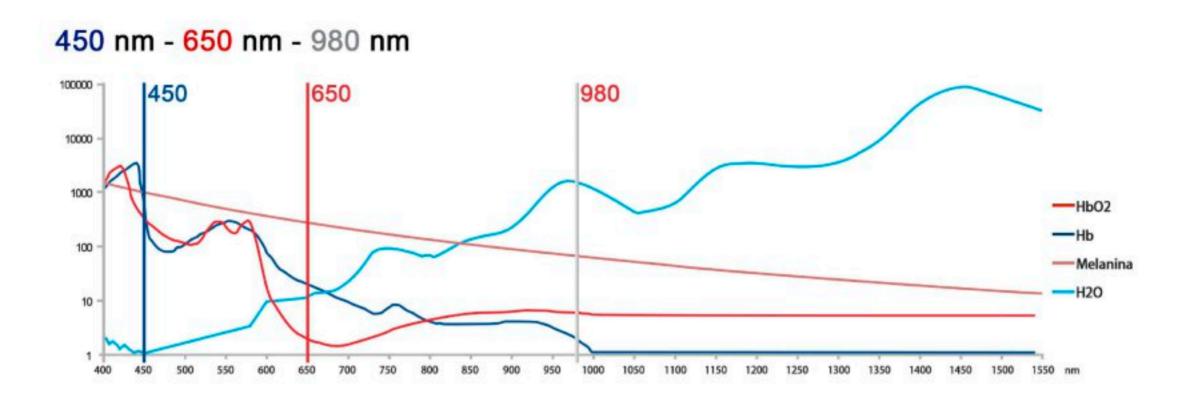








# Innovative three wavelengths

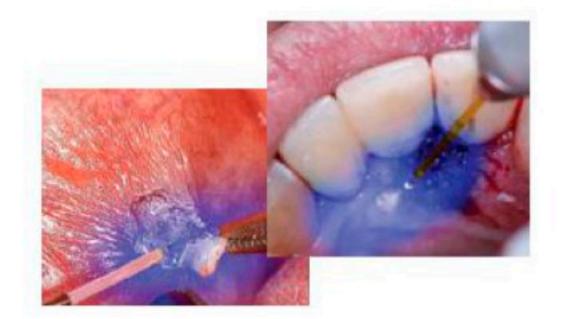


Each of the major biological chromophores has an absorption spectra. Above figure shows penetration depth of light is strongly dependent on wavelength.

Compared to traditional infrared laser(810nm/980nm), which is only based on hemoglobin absorption and not on water absorption, Berylas dental laser has so many surgical advance by using 450nm as its main wavelength. It provides more safety, precision, pain relief and faster healing in the treatment.

# - 450nm Wavelength

The 450nm blue laser is a perfect wavelength for soft-tissue surgical procedures, such as soft-tissue cutting, ablation, coagulation, incision. Because of the extraordinary absorption in hemoglobin and non-absorption in water of the 450nm blue laser, there is almost no thermal damage and more precise cutting in the treatment with no side effects for patients.



# - 650nm Wavelength

The 650nm laser can be well absorbed by melanin, ensuring a high close of energy on the surface region. It is often used for low level therapy(LLLT) as it is a great wavelength for tissue regeneration, anti-inflamation, wounds healing and fast scarring.

### - 980nm Wavelength

The traditional 980nm laser with high absorption in water and high thermal effects having excellent vaporization capacity,hemostasis and reduced possibility of tissue necrosis,so it performs efficiently in periodontal diseases, TMD therapy and teeth whitening.



# Clinical Applications Of Berylas



### Surgery

- Biopsy
- · Crown lengthening
- · Excision of lesions
- Exposure of unerupted/partially eruped teeth
- Fibroma removal
- Frenectomy
- Frenotomy
- · Gingival incision and excision
- Gingival troughing
- Gingivectomy
- Gingivoplasty
- · Implant revovery
- Incisions and draining of abscesses
- Laser assisted flap surgery
- Leukoplakia
- Operculectomy
- Papillectomy
- Reduction of gingival hypertrophy
- · Removal of granulation tissue
- Removal of hyperplastic tissues
- Tissue retraction for impressions
- Vestibuloplasty

# Perio & Hygiene

- Debridement of diseased epithelial lining
- Laser removal of diseased,infected,inflamed and necrosed soft tissue with the periodontal pocket
- Laser soft tissue curettage
- Sulcular debridement(removal of diseased,infected,inflamed and necrosed soft tissue in the periodontal pocket to improve clinical indices including gingival index,gingival bleeding index,probe depth,attachement loss and tooth inability)

### **Endodontics**

- Pulpotomy
- Pulpotomy as dajunct to root canal therapy

### Others

- Hemostasis of donor site
- Herpetic ulcers of the oral mucosa
- Treatment of aphthous ulcers
- Treatment of canker sores
- Bleaching/Whitening
- Low Level Laser
   Therapy(LLLT)/Photobiomud
   ulation(PBM)

# **Berylas In Practice**

- Minimal bleeding, swelling
- Less or no anesthesia
- More precise cutting
- Less or no pain
- Minimal or no suturing
- Little or no gingival recession
- Less drug intervention
- Reduction in surgical time
- Minimal postoperative discomfort
- Faster healing
- Efficient whitening with excellent result



### **Fibroma**







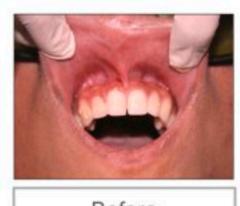
Directly after



Two weeks later

- No pain or discomfort,no need suturing,the healing process was completed in 7days

# Frenectomy



Before



Directly after



Two weeks later

- Easy application, better coagulation, less bloodless

# Gingival Pigmentation



Before



Directly after



Two weeks later

- Less swelling and pain, esthetic effect



# **Full Accessories For Different Requirements**

# **Accessories:**

Multi-functional handpiece with itegrated finger switch

Biostimulation tip (Diameter 7mm)

Biostimulation tip (Diameter 3.5mm)

Disposable tips (Diameter 300um)

Disposable tips (Diameter 400um)

Whitening tip (38\*12mm)

Therapy tip (Spot diameter 15-30mm adjustable)

Foot switch

Safety goggles (For wavelength 450nm+650nm+976nm)

Battery pack (Already Built-in)

Interlock

Power cord

Portable carry case



Multi-functional handpiece



Replaceable tips



The unit

# **Technique Specification**

Product Model	Berylas
Laser Type	GaAlAs Diode
Laser System	Class IV
Wavelength	450nm,650nm,980nm
Power	4W,500mW,10W
Operation Mode	CW/Single Or Repeat Pulses
Pulse Duration	10us-3s
Repetition Rate	1Hz-20KHz
IP Degree of Protection	Footswich(waterproof):IPX8
Aiming Beam	650nm,Power<5mW
Cotrol Mode	True Color Touch Screen(7 inches, resolution 600*1024)
Tansmission System	Medical Fibers With SMA905 Connector
Power Supply	100V-240V~at 2.0A
Dimensions	160(W)*180(L)*235(H)mm
Weight	2.4KG





