

810nm Diode Laser

User&Training Manual





.Warning

Dear user:

Thanks for using our diode laser , in order to fully make use of our laser, we sincerely suggest following:

- Please read the instruction in detail and keep it for further reading and consulting;
- Please follow the instruction to fit and operate machine correctly;
- Please do not remove and change any accessories of machine;
- Forbidden others to open and remove the mainframe except authorized or trained people or technician in the company;
- Forbidden others to change and maintain the machine except professional people;
- Please contact us if there is any trouble during operation;

II. Technical specification:

Laser type: diode laser

Wavelength: 810nm

Operate panel: Large 10.4 inch LCD Touch Screen

Output power: 500W

Spot size of hand-piece: 10*12mm

Delivery mode: direct sapphire coupling

Power density: 01-30J/cm²

Repetition frequency: 1-5Hz adjustable

Pulse width: 020-400ms adjustable by fixed frequency

Cooling way: water circulation system +semiconductor cooling

Cooling level: sapphire instant cooling and skin surface lows to -10degree centigrade

Package size: 120cm*60cm*60cm

Net Weight: 40kgs



III. Machine structure



IV. Self-purchasing consumables

Cooling gel



This device uses cooling gel for medium, client has to buy on their local market by themselves; it is a kind of transparent, insipid, used on ultrasound or IPL skin treatment;

V.Fill Water for device

- 1: the device is worked by water circulation, so before use must add water first for device;
- 2: For protecting device performance, the water must be distilled water, No be tap-water or other dirty water;

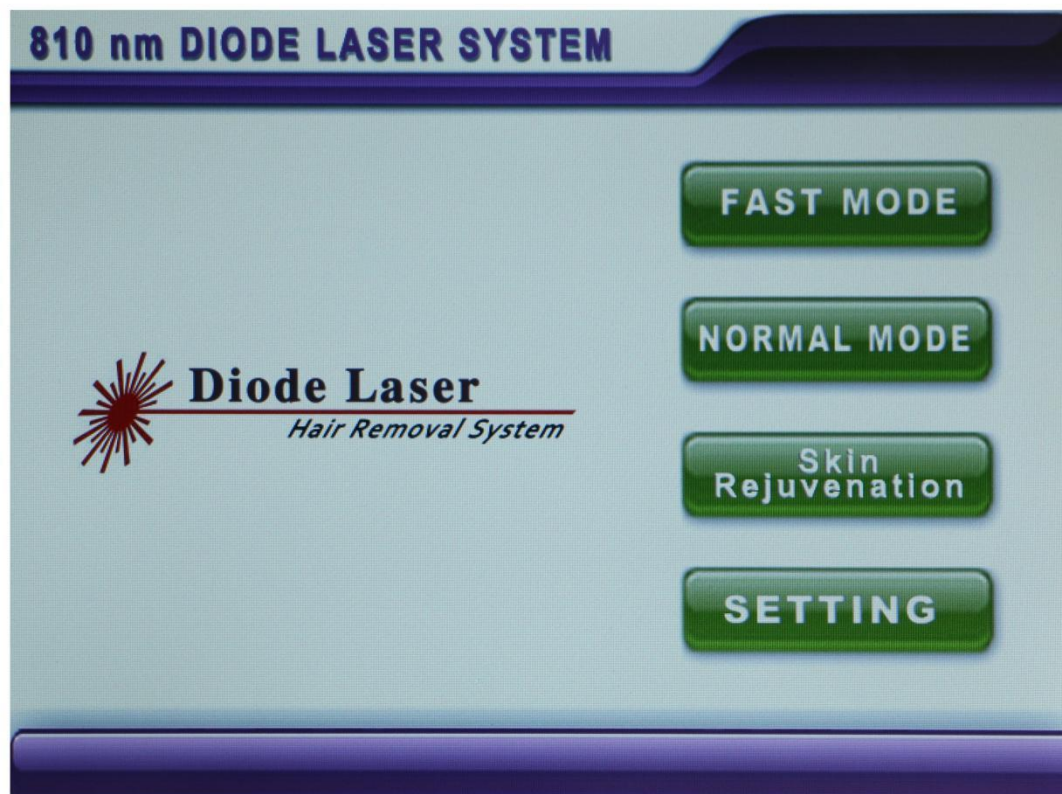


- 3: Before fill water, take the cover  away from water inlet and water overflow, then fill water from water inlet hole, when water come out from water overflow hole, means the water tank is full. Stop filling water.
- 4: For good water circulation, don't cover the water inlet hole and water overflow hole. Only need to cover the water outlet.
- 5: We advise replace new water every month. Take out the used water out from water outlet, then fill new water from water inlet.



6. This is laser radiation, before use device make sure that operator wears protective glasses and patient wears goggle in case of eye injury;
7. Connect correct voltage for device: connect 220V to 220V, 110V to 110V, DO NOT CONNECT WRONG VOLTAGE IN CASE OF BURNING DEVICE!
8. After turn on the machine, wait a few minutes for water circulation. Then can start to do treatment.

VI. Screen Operation:



Menu page



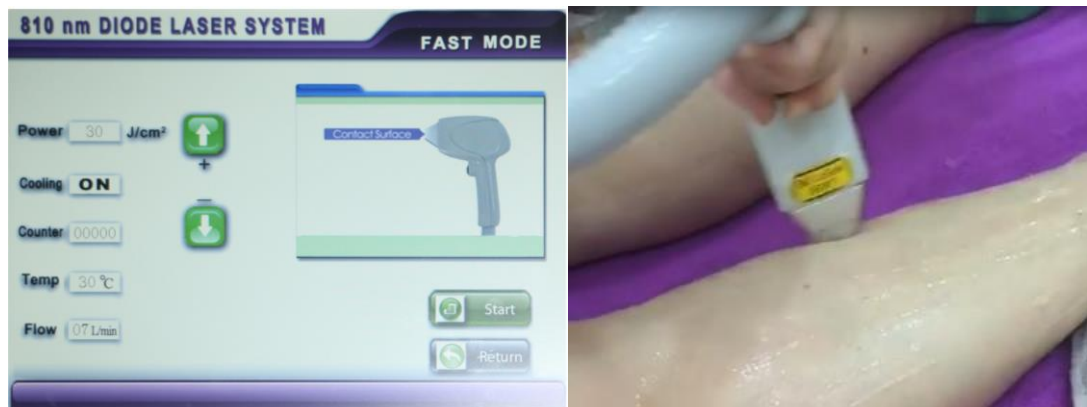
At this menu screen, there is a three treatment functions: fast mode, normal mode and skin rejuvenation model;

FAST MODE it is FHR (Fast hair removal) mode, this mode is suitable for public treatment, easy to start a treatment, most popular with beautician in beauty salon, spa centers, etc

NORMAL MODE it is standard hair removal mode, according to the different individual to have a targeted treatment, designed for doctor and professional trained operator use in medical clinic, surgical hospital, etc

Skin Rejuvenation it is a additional function of skin rejuvenation with low energy shooting to make face smooth, tender and younger;

SETTING it is system settings, user backstage;



Fast mode

it is FHR (Fast hair removal) mode, this mode is suitable for large size treatment.

Power J/cm² : the power changes from 01-30J/cm²;

Cooling **ON** : the water cooling is default “on” after device running;

Counter : show current shooting numbers of hand-piece, automatically be cleared at next entry;

Temp : show current machine working temperature

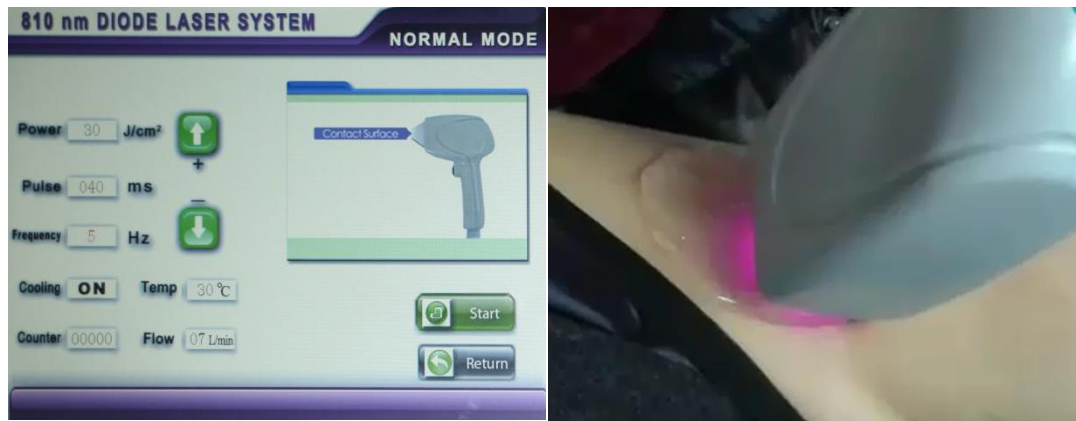
Flow : show current water circulation

Start system under standby condition;

Stop system ready to work;

Return press “return” system automatically goes back to menu screen;





Normal mode

it is HR (hair removal) mode, this mode is suitable for small size treatment.

Power J/cm² : the power changes from 01-30J/cm²;

Pulse ms : pulse means pulse width, changes from 20-400ms;

Frequency Hz : the frequency changes from 1-5Hz;

Cooling **ON** : the water cooling is default “on” after device running;

Counter : show current shooting numbers of hand-piece, automatically be cleared at next entry;

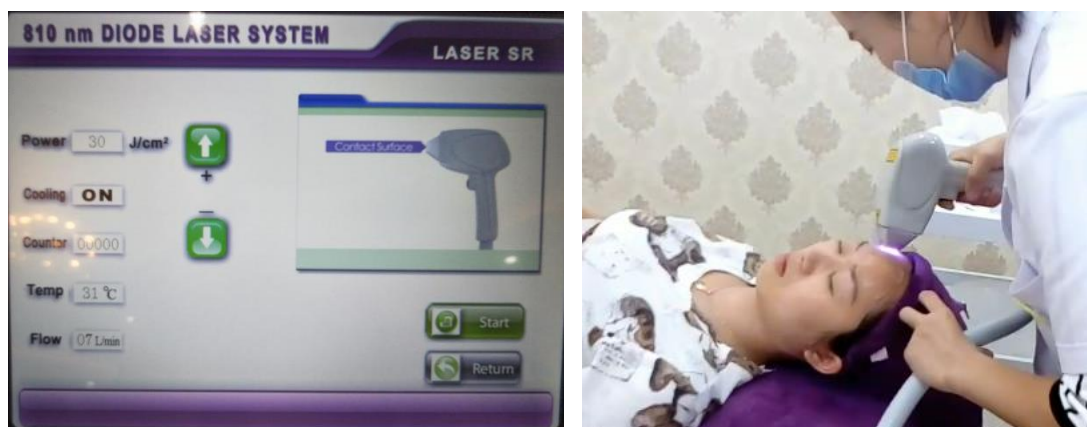
Temp °C : show current machine working temperature

Flow L/min : show current water circulation

Start : system under standby condition;

Stop : system ready to work;

Return : press “return” system automatically goes back to menu screen;



Skin rejuvenation



it is a additional function of skin rejuvenation with low energy shooting to make face smooth, tender and younger;

Treatment parameter is adjusted by following principles:

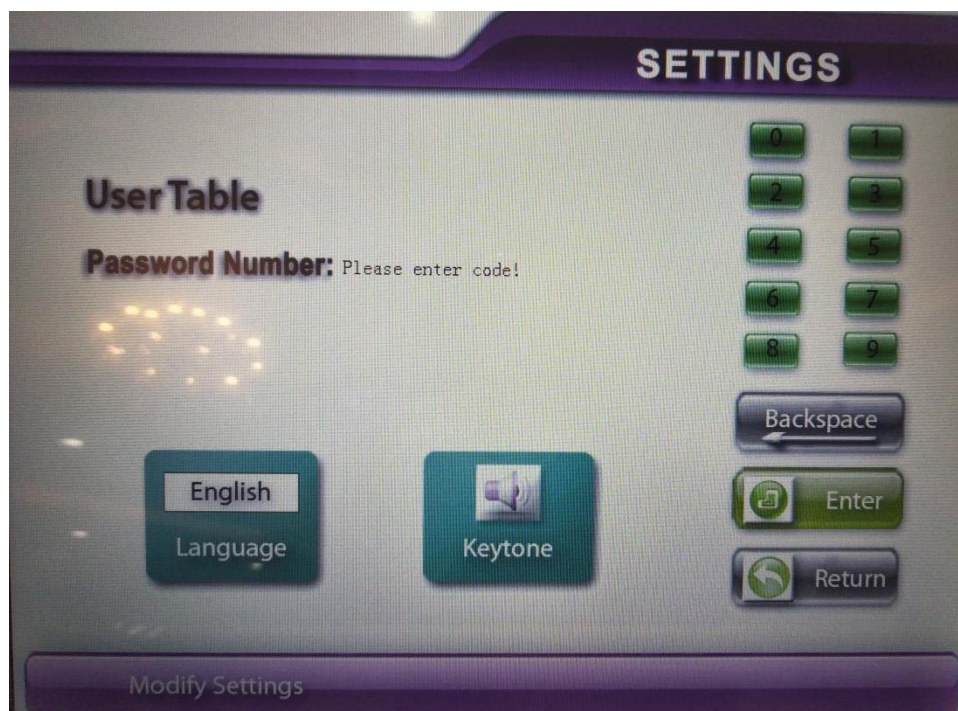
Frequency at 5Hz:
Pulse from 020-080J/cm2 adjustable;

Frequency at 4Hz:
Pulse from 020-100J/cm2 adjustable;

Frequency at 3Hz:
Pulse from 020-132J/cm2 adjustable;

Frequency at 2Hz:
Pulse from 020-200J/cm2 adjustable;

Frequency at 1Hz:
Pulse from 020-400J/cm2 adjustable;



System setting

Cautions: At each treatment function, the cooling is default "ON", PLEASE DO NOT CLOSE IT IN ORDER TO SYSTEM NORMAL WORKING !



X .Hair removal steps

1: Cleaning:

Before do treatment, clean and disinfect the treatment area;



2: Shaving hair away:

For better energy transmit to skin, need to shave the exposed hair away;



3: Daub cooling gel:

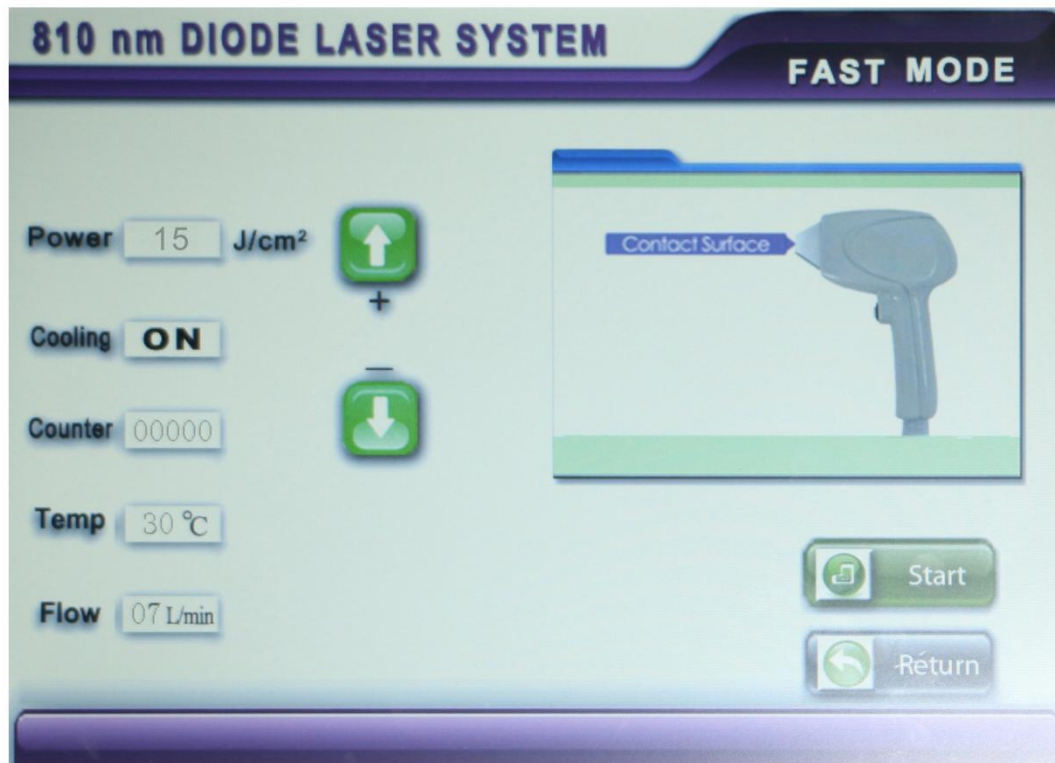
Cooling gel can reduce discomfort during treatment, so before start treatment daub proper cooling gel onto treatment area (normal 2mm thickness)



4: Set parameters for device:

Gradually set pulse width and corresponding power, frequency to achieve the best user experience;





5: Hair depilation:

The method to do hair depilation: the hand-piece (sapphire) is stick to skin tightly, and sliding 6-7 times back and forth; during this treatment, observe the changes of skin: if skin no obvious changes, need to increase power until user feels hot and the skin on treatment area appears flushed;



6: Cleaning and Ice compress:

After do treatment, clean again the treatment area, and do ice compress to partial skin for 10-15 minutes if needed; for device, return to menu from treatment screen, turn off device with key switch and clean the sapphire with tissue;



Before and After Hair Removal Photos:



XI.Cautions after treatment:

- 1: After finished treatment, the treatment area will feel slightly scorching hot and skin around hair follicles appears erythema, which is normal phenomenon, do ice compress to partial skin for 10-15 minutes if needed;
- 2: the residual hair on treatment area can pull out in 24 hours or automatically fall off in several days;
- 3: The current day of treatment, use low temperature water to wash and use liquid skin care products;



4: After treatment, pay attention to protecting moisture and sunscreen;

Cautions before and after therapy:

- 1: One month before treatment, pay attention to the sunscreen;
- 2: Two weeks before treatment, the treatment area does not remove hair with plucking out, with cream or electrolysis ;
- 3: Two days before and after treatment, to avoid chemical or mechanical stimulation;
- 4: Two weeks before and after treatment, to disable the filling or other injection, etc the kind of interventional therapy

Therapy periods:

Underarm, Face: One Therapy interval---4-6 weeks;

Arms and legs, body: One Therapy Interval----4-6 weeks;

Treatment Period: 3-5 times;

Contraindications:

The following symptoms are forbidden to use:

- The pregnant
- Recently (within 1-3 months) accepted the sun exposure or sun bath
- The patient with open wound
- The patient with infected wounds
- The patient suffering from skin disease
- The patient with epilepsy

Attentions:

- 1: First check the host, accessories, power supply wire is broken or not before use;
- 2: connect correct voltage (220V to 220V, 110V to 110V), can not get through wrong voltage.
- 3 Start system, in addition to television, refrigerator, Do not turn on electrical power device at the same time;
- 4 Before therapy, please take hearing aid, electronic wristwatch, magnetic card, mobile phone or other things off first, pay attention to child's care to avoid touching;
- 5 During the therapy, drink more water based on your physical;
- 6 In case of happening special circumstances or accident, please immediately stop using and consult professionals;
- 7 Patients with above mentioned medical electrical device can not use this system at the same time;



- 8 Above mentioned patients should be agreed by professionals before using this device;
- 9 Please immediately turn on power supply, stop using if following abnormal situation happened:
- 9A water or other things into host;
- 9B: The sound of system to be unusual; 9C
- Abnormal smell or smoke;
- 9D: Any accessories broken;
- 9E: Natural disaster, earthquake, and the sudden thunder;
- 10: When the treatment is finished, please cut off the power supply, be sure to unplug the power plug from the power socket;
- 11: Transportation and storage conditions: the transport process should be to prevent sun and rain, packaged equipment should be stored in relative humidity of not more than 80%, no corrosive gas and ventilated room;



