

A woman's back is shown from behind, with her right arm raised and hand behind her head. A glowing red area is visible on her lower back, indicating the site of laser treatment. The background is dark and moody.

LASERCONN

Lasers for
DEEP tissue therapy

Pain Relief

Reduced Spasm Improved

Flexibility Increased

Circulation

SANHE LASERCONN TECH CO., LTD

www.laserconn.com

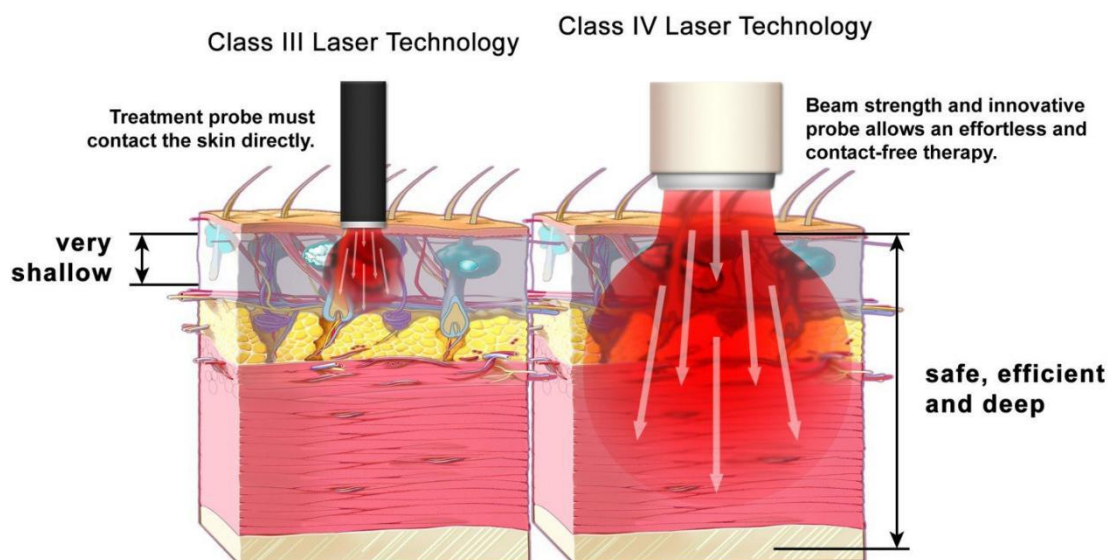
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I About Deep Tissue Laser Therapy

1. Principle

Laser Therapy is used for the relief of pain, to accelerate healing and decrease inflammation. When the light source is placed against the skin, the photons penetrate several centimeters and get absorbed by the mitochondria, the energy producing part of a cell. This energy fuels many positive physiological responses resulting in the restoration of normal cell morphology and function. Laser Therapy has been successfully used to treat a broad range of medical conditions, including musculoskeletal problems, arthritis, sports injuries, post-surgical wounds, diabetic ulcers and dermatological conditions. The central goal of laser therapy is to stimulate the cell to perform its natural functions, but at an enhanced rate. Targeted in hemoglobin and cytochrome c oxidase, the high power diode laser could help the respiration and then in result have a good performance therapy.



DEPTH OF EFFECTIVE DOSAGE AS A FUNCTION OF TREATMENT TIME

In sharp contrast to “Cold lasers” which provide no feeling or sensation, high power diode laser therapy will provide warm and smoothing feeling. Unlike many pharmacological treatments that mask pain or only address the symptoms of disease, Laser Therapy treats the underlying condition or pathology to promote healing. This means that the treatments are effective and the benefits of Laser Therapy are long lasting.

2. Indications

Anti-Inflammation

Laser therapy has an anti-edemic effect as it causes vasodilation, but also because it activates the lymphatic drainage system (drains swollen areas). As a result, there is a reduction in swelling caused by bruising or inflammation.

Anti-Pain (Analgesic)

Laser therapy has a high beneficial effect on nerve cells which block pain transmitted by these cells to the brain and which decreases nerve sensitivity. Also, due to less inflammation, there is less edema and less pain.

Accelerated Tissue Repair and Cell Growth

Photons of light from lasers penetrate deeply into tissue and accelerate cellular reproduction and growth. The laser light increases the energy available to the cell so that the cell can take on nutrients faster and get rid of waste products.

Improved Vascular Activity

Laser light will significantly increase the formation of new capillaries in damaged tissue that speeds up the healing process, closes wounds quickly and reduces scar tissue.

Increased Metabolic Activity

Laser therapy creates higher outputs of specific enzymes, greater oxygen and food particle loads for blood cells.

Trigger Points and Acupuncture Points

Laser therapy stimulates muscle trigger points and acupuncture points on a non-invasive basis providing musculoskeletal pain relief.

- » Back/neck pain
- » Sciatica
- » Dizziness/vertigo
- » Post natal back pain
- » Muscular pain
- » Sports injuries
- » Pelvic issues
- » Frozen shoulder/shoulder pain
- » Achilles/ankle injuries
- » Menstrual cycle issues
- » Elbow injuries



II Introduction to the TheraLAS

1. Overall View



2. Specification

Laser Power	30W
Wavelength	1064nm
Spot Size	2mm up to 15mm diameter (upon distance)
Peak Power(%)	10~100
Pulse Width	1~200ms
Repetition Rate	1~200Hz
Time Meter	1-60Min
Working Mode	Pulsed & CW
Display	8 inch Touch Screen
Handle Piece	1.2 meter cable
Net Weight	4kg
Dimension	35cmx29cmx17cm

3. Accessories

	
Machine Body	Handle
	
Power Cable	Key
	
Goggles for operator	Goggles for patient

III Installation

1. Install the handle



2. Insert the power cable



3. Insert the power cable



4. Insert the interlock



5. About the emergency button

Make sure the RED emergency button is not depressed. If depressed, turn the emergency stop button in a clockwise direction . It will pop out and allow treatment. This button can also be pushed to stop treatment in an emergency situation. It should not be used to routinely turn the power off.

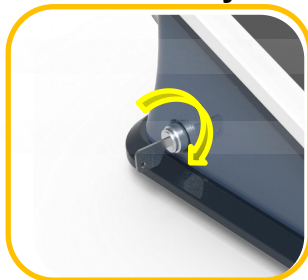


IV Operation

1. Connect the power cable and switch the button on the back of the machine

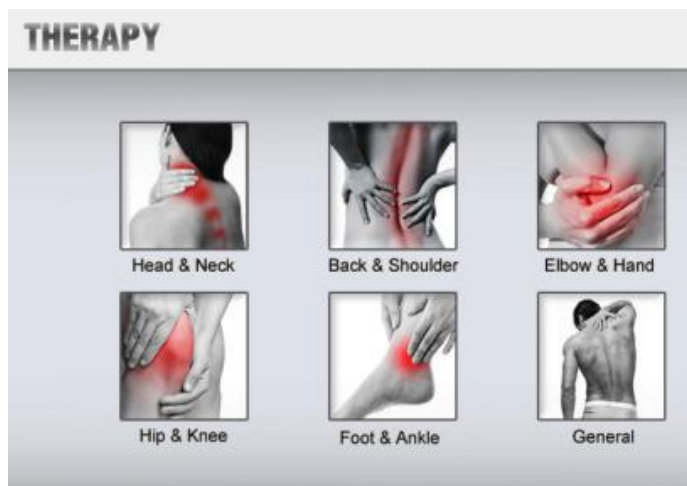


2. Switch the key to turn on the machine



3. Introduction to interface

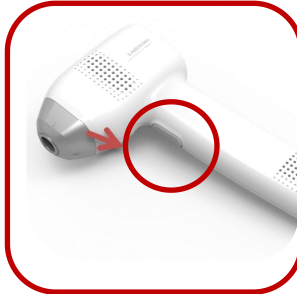
- 3.1. Body part option



- 3.2. Parameter setting



- A. Adjust the Peak Power to 80%.
- B. Adjust the Pulse Width and Frequency according to the parameter list
- C. Press Start Button: status: “**READY**” to “**STANDBY**”
- D. Press the TRIGGER in the handle
- E. Then laser will emit



V Treatment

Operation instructions

This laser is a serious medical device and extreme caution should be used in not only the treatment aspect of the laser, but general safety as well. The complete staff should use caution at all times and treat the **Therapist** (in this manual, it means the 30W diode laser therapy device) as the major piece of medical equipment it is.

Designate a special location for the laser, and make sure the safety key switch is removed when not in use. Put the “LASER IN USE” sign up on the door every time the laser is being used. Make sure everyone has protective eyewear when the **Therapist** is in use if they are in the room where treatment is being done.

- A special person should be designated as the Laser Safety Officer (LSO) and be responsible for all aspects of the laser in both use and non-use.
- All users of the **Therapist** laser should have at least a minimal amount of training before use. The user should be familiar with all parts of the laser as well as safety and operation.
- Have measures in place to protect staff and patients
- Make sure all persons in the room have appropriate protective eyewear and use it
- Use the LASER IN USE sign and display it for everyone to see
- NEVER point the laser emitter at anyone at anytime. Its use is solely for therapeutic treatment
- Remove safety key when not in use
- Secure laser from unauthorized usage

Following are the steps

- 1) Choosing the treatment body parts, different body part will use different power and method.
- 2) Make sure the skin color, if light color, the power needs to be higher. Otherwise, lower.
- 3) Wear the glasses/goggles for eye protection and start the treatment.
- 4) The first time treatment will release the pain about 30-40%.
- 5) Keep a distance of 1-2cm away from the skin. Use the hand piece in spiral direction and if

some part hurt badly, stop at this position for several seconds. Start from 4.2w (peak power 70%, pulse width 20%, frequency 10Hz), and adjust the parameters according to the skin color, the thermal feeling, the body parts of the patients.

6) First treatment shall last 10-15minutes, and once in a week. Later the doctors can do the treatment according to the patients' situation.

1. Before treatment

1.1 Prepare the following

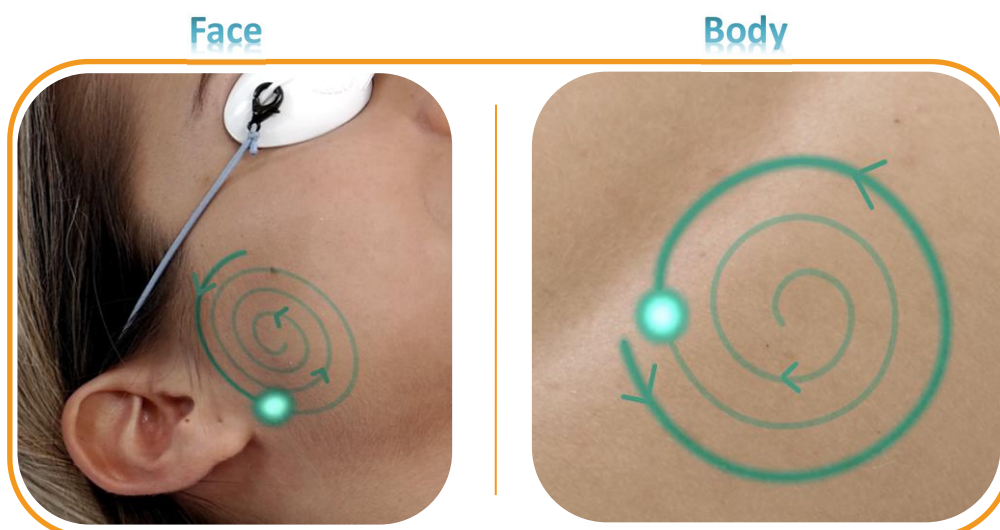
Goggles for both operator and patient;
Suite up the operator;
Locate the treated area;
Clean or wipe the treated area with alcohol;
Clean the handle window with alcohol cotton;

2. During Treatment

2.1 Method: A. handle 3-5cm above the skin

- B. Keep handle vertical with the treated area
- C. Keep inquiring patient's feeling, if feel too hot, lower down the energy or speed up, if no feeling at all, increase the energy or slower down.
- D. Common treatment time 3-10 mins.
- E. Most painful point need to stay for 2-3 seconds.

2.2 Step 1: Move in a spiral course for 2-5 mins



2.3 Step 2: Move one line by one line for 2-5 mins



2.4 Suggest Parameters

You may have to adjust the power due to skin pigment, size of your patient, and tolerance to laser therapy. No one can give exact and perfect treatment setups for every person, and as mentioned, should be adjusted accordingly.

Recommend parameter for different body parts

Body parts	Peak Power (%)	Pulse Width (ms)	Frequency (Hz)	Avg. Watt	Recommend Time
Cervical	85	20	13	6.6	10min.
Elbow	80	30	10	7.2	5min.
Shoulder	80	30	12	8.6	4min.
Lumbar-stenosis-disc	80	30	15	10.8	7min.
Knee	80	25	11	6.6	5min.
Thoracic	80	25	13	7.8	9min.
Plantar fascitis	75	25	15	8.4	5min.
Ankle	80	25	13	7.8	5min.
Wrist	75	30	16	10.8	4min.
Foot	80	25	10	8.4	10min.
General tendonitis	80	25	14	8.4	9min.

Recommend parameter for others

Treated Area	Peak Power (%)	Pulse Width (ms)	Frequency (Hz)	Avg. Watt	Recommend Time
Whole face	60	20	10	6.6	10-15min.
Wound Healing (Before treatment)	80	30	15	7.2	5-10min.
Wound Healing (After treatment)	60	20	10	6.6	5min.

2.5 Technical Parameter Adjustment

Parameter instructions

Parameter	Range	Step	Recommend initial value
Power(Avg Watt)	0-30W	0.1	4.2W
Peak power	10-100%	5	70%
Pulse width	5-200ms	5	20ms
Frequency	1-200Hz	1	10Hz
Time	1-60Min	1	5min

2.6 Session setting

Once or Twice a week.

2.7 Treatment feeling

It can create little to no sensation or it can create **a gentle, soothing warmth**. Feel like “laser massage.”

3. After Treatment

No bath within 24 hours

No sun exposure

Apply a moisturizing mask after face treatment

VI Warranty Notice

Please take necessary protections for the operation of the machine and handle piece, and notice that following situations can not be warranted:

- 1) Power up the system without connecting the handle piece.
- 2) Regular drops of the handle piece.
- 3) Wrong input VAC.
- 4) Other manual operating mistakes.
- 5) In case of emergency, the first thing the user should do is:
 - Remove pressure off the foot pedal which should stop all laser emissions.
 - If needed the RED EMERGENCY STOP BUTTON on the upper left corner of the emitter base unit can be pushed
 - Turn the safety key switch to the left
 - In worse case scenarios, unplug power cord from the wall

VII ABOUT LASERCONN

LASERCONN is an advanced Medical & Aesthetic laser manufacturer from Beijing, China. Since 2007, the founders of the company have been focusing on high reliability & long life time research of the high power diode lasers. And now we become the leading company that can provide diode laser source with over 50 million shots(10Hz, 10J/cm², continuously shoot), which is 5~10 times longer compared with lasers from Israel, Germany and USA, 20-30 times more than suppliers from China.

Laserconn has been providing these advanced lasers for various dermatological applications, including Hair Removal, Pigmented lesions and Tattoo Removal, Physiotherapy, Lipolysis and body contouring, Vascular Surgery & EVLT Treatment, Eye & Face tightening and lifting etc.

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