



# Laser Frequency Manual

**For Veterinary use only**



Last revised: June 12, 2020

# **LASER SHOWER FOR HORSES**

**The Centurion Tesla 21+ Laser Shower was specially developed for extended area applications. The 21 laser diodes are working large areas which is covered homogenously. This optimizes the effect of the laser and also saves time in the Equine Laser Therapy.**

**Equine Hair can reflect therapy effects – a problem that is difficult to overcome for conventional laser systems. The Centurion Tesla 21+ Laser Shower surmounts this barrier in an innovative way by using an exchangeable comb adapter.**

**The laser light is conducted through the fur directly onto the skin with 21 upstream fiber-optics combs, thus optimizing the impact of the laser at precisely those places where other Laser Products are not as effective.**

**Especially in veterinary medicine, the laser comb is an indispensable tool for effective Therapy Applications.**

**The Centurion Tesla 21+ Laser Shower can be set individually for special applications. Treatment dose, mode of operation as well as therapy time are shown on the colour display.**

**In addition to the Multi-frequency spectrum mode of operation and the tried-and-tested CW (continuous wave), and other frequency programmes (such as Alpha, F1 Bands, and Sweep frequencies) are already preset.**

**Now also with FI (frequency-integrated) bands. Automatically running pre-set special frequencies. A booklet with sample indications is supplied. Ideally suited for laser field therapy or laser frequency therapy.**

**The Centurion Tesla 21+ Laser Shower total diode output 2,100 mW (21 x 100 mW)**

- **21 laser diodes irradiate simultaneously an area of 8.5 square inches (55 cm<sup>2</sup>) with highest laser density**
- **Unlimited mobility thanks to Centurion Battery Pack**
- **Four red light diodes delimit the treatment area**
- **Laser power can be set**
- **Changeable fixture with integrated protective glass**
- **Multi-frequency, Alpha, F1 Bands, Sweeps (Alpha, Purr, Theta)**

**CW (Continuous Wave),**

- **Frequencies can be freely selected**
- **Color display**
- **Can be retrofitted from laser shower into a laser comb by flipping a switch**

## **ORTHOPAEDICS**

**Orthopaedic indications are among the ones most frequently mentioned in connection with LLLT. This is also the field with the most clinical studies on the effects of LLLT. Pain conditions of the musculoskeletal system are often associated with inflammations, restricted mobility, muscle tension, and/or muscle weakness. LLLT can have a positive effect on these symptoms, too, which in many orthopaedic ailments not only translates into an added benefit but is part and parcel of the healing process.**

## **EFFECTS**

**Tissue regeneration – Laser therapy is employed to speed up and improve the quality of tissue regeneration and boost the tensile strength and elasticity of tissue.**

**Pain relief – After the promotion of wound healing processes, the treatment of pain is the second major area of application of LLLT. In particular, pain in the musculoskeletal system.**

**Inhibition of inflammation – Slowed-down or blocked wound healing processes and many pain conditions are linked with inflammations. LLLT can inhibit them, thus contributing towards wound healing and pain relief. Generally speaking, low-level laser therapy can be applied to inhibit inflammations in all accessible body areas. This includes, in particular, inflammations of the skin and the mucous membrane.**

**Special accessories are available for the different indications:**

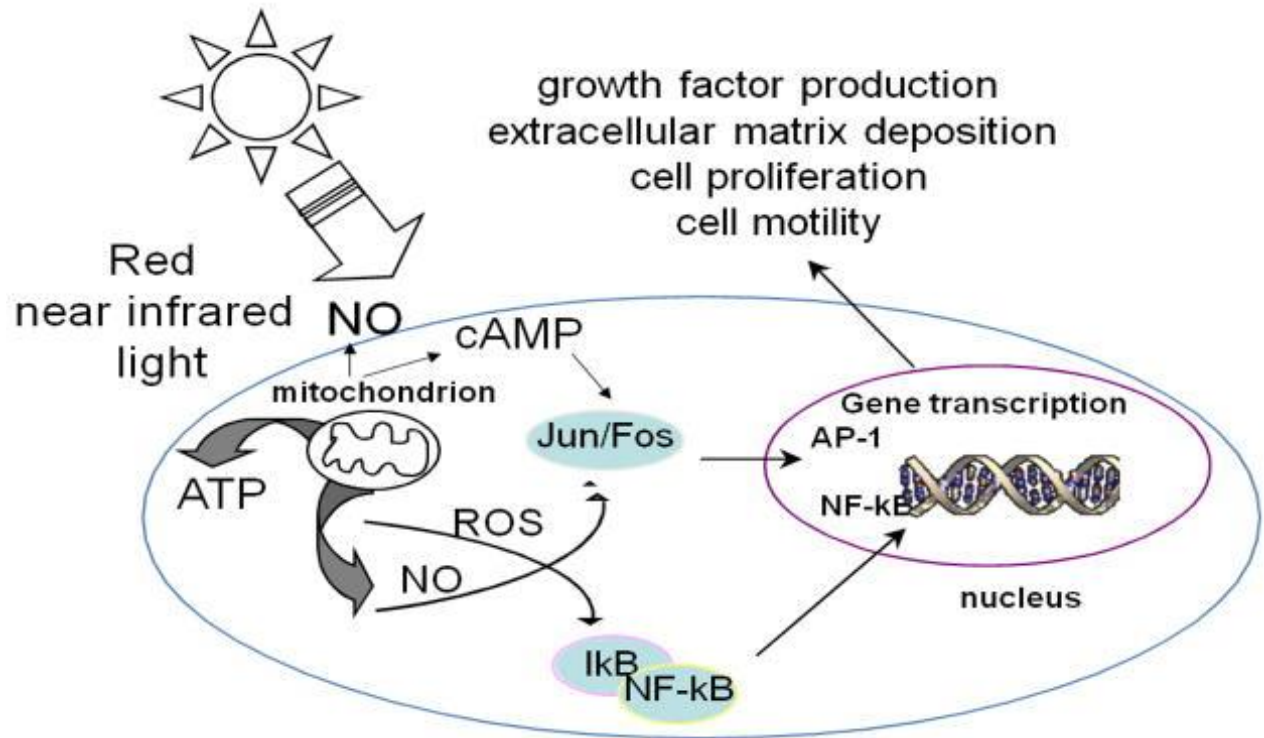
- **Laser Showers for laser applications on large areas in the field of veterinary medicine**

## **MODES OF ACTION**

**Similar to the photosynthesis of plants, the effects of LLLT are brought about by photochemical processes in the cells' mitochondria. When applied properly – i.e., especially in the correct dosage – low level laser light reduces oxidative stress in the tissue while increasing ATP synthesis.**

**The primary effects of the biological stimulation takes place at the cellular level. Here the monochromatic red and infrared beams are absorbed by components of the respiratory chain, which enhances the electrochemical potential of protons, ATP, RNA, and protein synthesis, oxygen consumption, the membrane potential, and the synthesis of NADH.**

# Mechanisms of LLLT



## Frequency Modes:

### Multifrequency:

In the Multifrequency Mode the frequencies are applied as determined by the random generator. It constitutes a frequency cocktail of an interval/range of 200 Hz to 3.5 KHz. Multifrequency I a Programme that can be Universally Applied and is Powerful and effective.

It is not only used by Therapists who still lack confidence in using individual frequencies but is also part of the basic equipment of Laser Frequency Therapists. There are two models which can explain why

**this mode has been shown to serve as a suitable standard that yields excellent results.**

**On the one hand this programme works like a Multivitamin Cocktail that is bound to include the “Right” frequency, if only briefly. It is absorbed by the Body and Cells, while the remaining stimulations are “mute”, as they have no resonance on the on the body.**

**On the other hand, the Multifrequency range works like a kind of “white noise” or resistor noise.**

**Multi contains all frequencies in the same intensity – like white light containing all colours. White noise does not specifically strengthen deficient natural frequencies but dissolves interference frequencies. In many instances this effect also suffices to boost the self healing process.**

**Here the monochromatic red and infrared beams are absorbed by components of the respiratory chain, which enhances the electrochemical potential of protons, ATP, RNA, and protein synthesis, oxygen consumption, the membrane potential, and the synthesis of NADH.**

## **Alpha:**

**In the Alpha frequencies have an equally relaxing on people and animals. It is used with nervous, anxious patients at the beginning of treatment (e.g. above the Baihui point between the eyebrows) to make them receptive to the therapy.**

## The FI Bands:

a Our frequency bands transport sequentially integrated frequencies (FI = Frequency Integration). The FI Bands are not single frequency sequences. While single frequencies tend to address only one aspect of ailments with a number of connected causes, the FI band goes into resonance with many different aspects and levels. The resonance signal/the VAS is emitted immediately and is perfectly clear.

### FI Band Integrated

The frequencies of the FI band are integrated. This means that they have not been included haphazardly but come in a set sequence and with a defined weight and length of duration.

The super pulse which the band generates is a universal pulse and hence a perfect carrier of the different pieces of information.

### FI Band REGENERATION

3.632 – 10 – 285 – 73 – 4.625 – 528 - CW

 Key:

Vitalization, structure, regeneration, anti-aging



Application:

- All states of degeneration, decomposition and ageing of tissue
- Hurt and injured tissue

Where is it applied?

LOCALLY

- Above the trauma

- In the area being treated
- Above the dermatome

### Systemically

- Above the Spinal cord and bones
- Above the areas of the spleen and liver
- Above the plexus pulmonalis
- Above the thymus

### Sample indications:

Muscle dystrophy, degeneration of joints, wound healing disorders, muscle hardening (myogelosis) and shortening, loss of elasticity and difficult regeneration after disease.

### FI Band Pain

174 – 599.5 – 3.894 – 4.672 – 5.000 – CW

 Key:

Natural anaesthesia, grounding, and trust



Application:

- All pain conditions
- In instances of panic and fear due to injury and pain

Where is it applied?

### LOCALLY

- Above the pain area
- Above the radiating areas



- Above the dermatome

**Sample indications:**

**Chronic Pain, Myalgia, Chronic back problems**

**FI Band TRAUMA**

**174 – 528 – 10 – 73 – 4.672 – 4.625**

 **Key:**

**Quick aid in acute or chronic physical trauma**



**Application:**

- **Injured tissue**
- **Burn wounds**
- **After surgery**

**Bone, ligament and tendon injuries**  
**Strain trauma, haematomas, contusions**

**Where is it applied?**

**LOCALLY**

- **Above the trauma**
- **Above the area operated on including the wound scars**
- **Above the dermatome**

**Sample indications:**

**Wound healing disorders, fractured bones, pulled tendon, capsule injuries, cruciate ligament rupture**

## Sweeps:

Sweeps contain a continuous sequence of frequencies. This is important when it is not a single frequency that has an effect but a very specific, if narrow, frequency range. A sweep is not a “light sound” but a “light chord”

### Example: Bone Sweep

The purr frequency of cats speeds up the bone healing process, which has been scientifically proven. This is not a single frequency but a narrow frequency band within which all frequencies may occur. (Purring is a sound-noise rather than a single sound, that is to say, no single frequency. Only the mix of the frequencies has effects.)

### PURR SWEEP

The purr frequency of cats speeds up the healing process of fractured bones and injuries of the ligaments, tendons, joints, and generally the facial portion of the musculoskeletal system. The sweep can also stimulate the chondroblasts and support chondral ossification (cartilage disorders).

### Key:

Good healing effect with bone fractures and injuries of ligaments and tendons as well as the formation of cartilage tissue.



### Application:

- fractures
- Complete and partial tears of ligaments or tendons
- Decomposition of cartilage tissue
- Bone healing disorders

Where is it applied?

## LOCALLY

- Above the injured area
- Above the Joint

## ALPHA SWEEP

 Key:

Relaxed, Centered Serenity



Application:

- Becoming centered and Focused
- To promote relaxation and grounding
- For initiating a Therapy
- For Improved Learning

Where is it applied?

## LOCALLY

- Above the “GATES”
- Above the Baihui
- Above the Occipital bone
- Above the “Spindle”  
(between the shoulder points SI 11 right and left above the area between Th 1 to Th 6; plexus pulmonalis = shape of a spindle)
- Above the solar plexus

Sample indications:

**Start of the treatment of Anxiety, Fidgetiness, Nervous liability, Irritability and promoting deeper sleep.**

## **THETA SWEEP**



**Generating very deep calm putting mind to rest**



### **Application:**

- **For deep relaxation and sleep induction**
- **For easing the access to subconscious and conviction patterns**

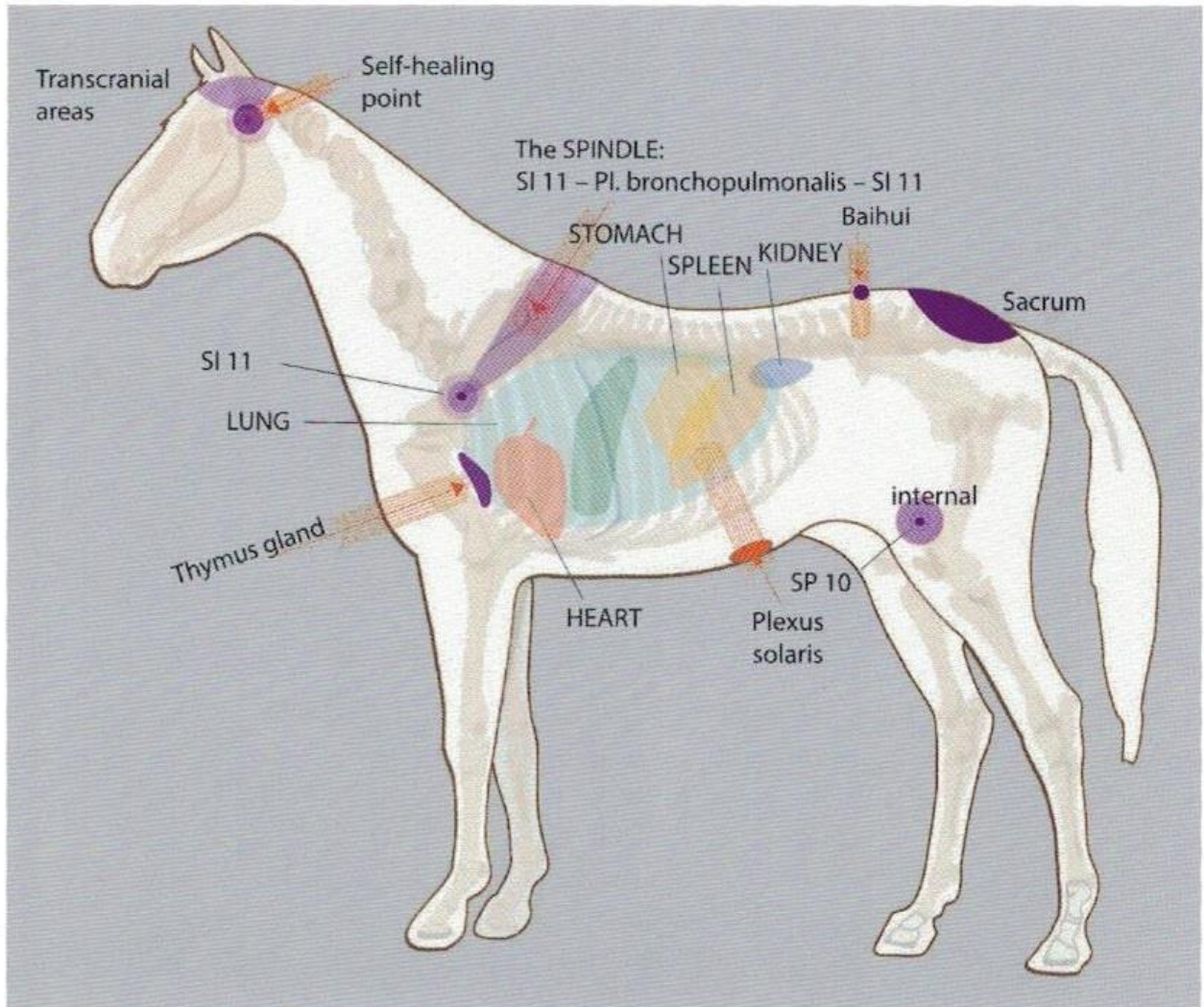
**Where is it applied?**

- **Above the “GATES”**
- **Above the Baihui**
- **Above the Occipital bone**
- **Above the “Spindle”**  
(between the shoulder points SI 11 right and left above the area between Th 1 to Th 6; plexus pulmonalis = shape of a spindle)
- **Above the solar plexus**

**Sample indications:**

**For achieving deep relaxation and inducing sleep. (healing from the zero field), for enhancing intuition specifically to dissolve subconscious thought processes.**

## POSITION OF THE INTERNAL ORGANS AND THE GATES IN HORSES



# POSITION OF THE INTERNAL ORGANS AND THE GATES IN DOGS

