



K-LASER™ CUBE*
CLASS 4 HIGH POWER LASER

A NON-OPIOID TREATMENT TO AID PAIN RELIEF

K-LASER™ **CUBE*** - CLASS 4 HIGH POWER LASER

A NON-OPIOID TREATMENT TO AID PAIN RELIEF

With the current worsening opioid epidemic, the importance of non-opioid treatment alternatives to help patients with acute and chronic pain has become increasingly important.

One such non-opioid alternative is laser therapy, a clinically-proven adjacent therapy modality widely used in clinical practice to help manage pain and inflammation.

Chattanooga® has been offering a range of low level lasers for more than 20 years, and now completes the portfolio with a High Power Laser series: the Chattanooga K-Laser™ CUBE.



K-LASER **CUBE 3**

3 wavelengths, 15 W ISP-12W-CW
Standard lens
2 years warranty+



K-LASER **CUBE 4**

4 wavelengths, 20 W ISP-15W-CW
Standard lens
2 years warranty+



K-LASER **CUBE 4 PLUS**

4 wavelengths, 20 W ISP-15W-CW
Dynamic lens
5 years warranty+



INTENSE SUPER PULSE

K-Laser CUBE's ISP mode helps promote deep tissue penetration without added heat. This exclusive technology means that you can use the same energy but at maximum power without pulling strength away from the laser.

INDICATIONS TO AID

- Temporary increase in local blood circulation
- Temporary relief of minor muscle and joint aches
- Minor pain and stiffness associated with arthritis
- Relaxation of muscles
- Muscle spasms



STANDARD ACCESSORIES



OPTIONAL ACCESSORIES



K-LASER™ CUBE*: THERAPEUTIC EFFECTS

LASER LIGHT & BIOSTIMULATION

Biostimulation is the ability to help stimulate and promote tissue growth while repairing at the cellular level.

The wavelengths of laser light are mainly absorbed by the chromophores, molecules located inside cells able to convert laser light. The products of this process are indispensable substances for the repair, growth and proliferation of cells.

Using the appropriate wavelength, the maximum therapeutic effect on the target tissue can be achieved.

Depending on the modulation of the wavelength and on the different parameters set, different effects can be achieved:

ANALGESIC EFFECT - LASER LIGHT CONVERTING INTO HEAT

Laser light is absorbed and partly scattered in the target tissue and thereby largely converted into heat.

This thermal stimulus to the nociceptors of the skin affects the peripheral neurological tract and polarizes the neurons important for our pain perception.

This polarization activates the neural and humoral endorphinergic pain inhibition system aiding in pain relief as a result.

ANTI-INFLAMMATORY EFFECT

Inflammation is necessary for healing. The challenge for the clinician is to control this acute inflammatory stage in order to allow the next stage of healing. The HPL units effectively modulate the inflammatory processes secondary to their deep stimulation of tissues. This deep stimulation triggers vasodilatation and increased oxygenation, which helps activate the main metabolic activities and resolves the inflammatory process quicker.

AIDS REGENERATIVE EFFECTS

The described acceleration of healing processes primarily manifests in the form of fibroblast activation. The actual cascade of healing is fueled by increased ATP synthesis and increased protein synthesis combined with cellular proliferation. Because of the non-thermal nature of this activation, only small amounts of laser energy are required. The attenuation of the laser light in the tissue depends on the localization of the lesion and determines the laser power required. Deeper structures such as tendons or joint capsules may require the application of higher doses to the surface.

REFERENCES - SOME CLINICAL STUDIES SUPPORTING THE EFFICACY OF HPL TREATMENT:

Effects of low-level laser therapy on pain in patients with musculoskeletal disorders. A systemic review and meta-analysis. Clijsen R, Brunner A, Barbero M, Clarys P, Taeymans J. Eur J Phys Rehabil Med. 2017 Aug;53(4):603-610.

Immediate pain relief effect of low level laser therapy for sports injuries: Randomized, double-blind placebo clinical trial. Takenori A, Ikuhiro M, Shogo U, Hiroe K, Junji S, Yasutaka T, Hiroya K, Miki N. J Sci Med Sport. 2016 Dec;19(12):980-983.

Efficacy of low-level laser therapy in the management of neck pain: a systematic review and meta-analysis of randomised placebo or active-treatment controlled trials. Chow RT, Johnson MI, Lopes-Martins RA, Bjordal JM. Lancet. 2009 Dec 5;374(9705):1897-908.

Meta-analysis of pain relief effects by laser irradiation on joint areas. Jang H, Lee H. Photomed Laser Surg. 2012 Aug;30(8):405-17.

Effect of high-intensity laser therapy in the management of myofascial pain syndrome of the trapezius: a double-blind, placebo-controlled study. Dundar U, Turkmen U, Toktas H, Solak O, Ulasli AM. Lasers Med Sci. 2015 Jan;30(1):325-32.

Low level laser therapy in primary Raynaud's phenomenon - results of a placebo controlled, double blind intervention study. Hirschl M, Katzenschlager R, Francesconi C, Kundi M. J Rheumatol. 2004 Dec;31(12):2408-12.

Low-intensity laser irradiation improves skin circulation in patients with diabetic microangiopathy. Schindl A, Schindl M, Schön H, Knobler R, Havelec L, Schindl L. Diabetes Care. 1998 Apr;21(4):580-4.

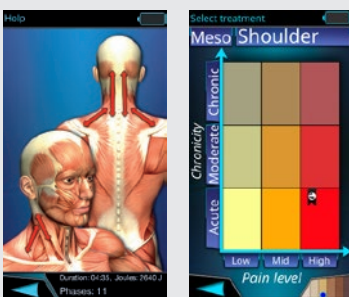
K-LASER™ CUBE*: DYNAMIC THERAPY

K-Laser™ CUBE technology aids optimal effect through the unique ability to use and modulate several pulse frequencies as well as helping to adapt to influencing factors specific to the patient such as skin color and level of chronicity of injury. We call this Dynamic Therapy.



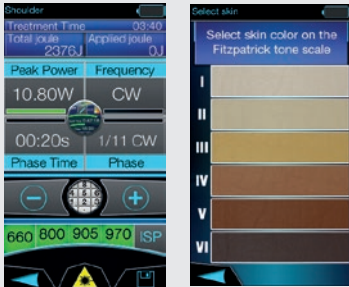
GRAPHICALLY-INTUITIVE AND CUSTOMIZABLE K-LASER CUBE THERAPY

K-Laser CUBE helps allow adjustment of energy delivered depending on the factors involved, thanks to selected menus that are graphically intuitive. Increased power and the wavelengths available play a crucial role in the success of the Laser therapy.



DIFFERENT TREATMENT AIDS ADAPTED TO LEVEL OF PAIN

According to the kind of pain experienced by the patient, K-Laser CUBE makes it possible to select specific treatments.



ADJUSTABLE TO AID ALL SKIN PHOTOTYPES

K-Laser CUBE, besides analysing body morphology and the types of tissues, also takes into account another crucial factor for our skin: melanin. Thanks to its innovative parameters, K-Laser CUBE recognises the skin's six phototypes, taking into account every pre-set protocol variant.



TISSUE-ADAPTED PARAMETER SETTINGS

Every K-Laser CUBE protocol consists of a dynamic parameter setting, to be chosen according to the different types of tissues.

THERAPY SETTINGS RECORDS

For ease of continuity of patient treatments the K-Laser CUBE's software allows the storage of the treatment specific settings and data of a patient in a compliant way without storing actual patient data. This data can be exported via wifi or USB, ready for file management.



K-LASER™ CUBE*

ERGONOMIC TECHNOLOGY AT THE HEART OF YOUR PRACTICE

QUICK RELEASE TECHNOLOGY (QRT) FOR RAPID SWITCHING OF ACCESSORY TIPS

HANDPIECE WITH INTERCHANGABLE OPTICS

This technology springs from the need to perform Dynamic Therapies on different application fields: from Physiotherapy to dermal-foot therapy, from Stomatology to Oral Pathology.



VARIABLE ZOOM FROM 1 TO 5 CM²

A better performing and more uniform therapy thanks to K-Laser™ CUBE Zoom.
(K-Laser CUBE 3 & 4: MP486-USA)
(K-Laser CUBE 4 Plus: MP554-USA)



ENT TIPS:

The optional ENT tip can be attached to the handpiece to allow ear, nose, and throat treatments. Now treating those hard-to-reach areas is easier, and the device's smart software automatically adapts the treatment power to the appropriate level.
(MP041P-USA)



K-LASER CUBE OPTIC PLUS: 12 CM²

With K-Laser CUBE Optic Plus treating extended areas is easier.
(MP475-USA)

EXTEND PLUS TREATING LARGER AREAS (OPTIONAL)

Extend Plus, with a 100 mm diameter is ergonomic and easy to position; it is equipped with special optics that help deliver energy uniformly across the entire treatment area and allows hands-free sessions without the risk of overheating.

Extend Plus is equipped with an articulated swivel arm and with a removable head with housing for the laser beam. Thanks to its wider emission cone, it can treat larger areas.

Extend Plus and Trolley
(PF115-USA)



RECHARGABLE BATTERY LITHIUM-ION

K-Laser CUBE is equipped with a rechargeable battery with 60 minutes operating time in case of continuous treatments.

(6239243CUBE)

TROLLEY (OPTIONAL)

This light and mobile transport trolley features a magnetic plate to improve stability when moving the mounted K-Laser CUBE device.

(PF094-USA)



PORTABLE THERAPY MAXIMUM MOBILITY FOR EASE-OF-USE

Thanks to the K-Laser CUBE device's compactness and light weight (under 3 lbs), therapists are free to perform treatments wherever they choose. This makes it an ideal tool in the fields of sports medicine, physiotherapy, and rehabilitation.

LCD FULL COLOUR GRAPHIC DISPLAY TOUCH SCREEN MAXIMUM VISIBILITY FOR EASY INTERACTION

The LCD, high-definition, full-colour screen offers excellent visibility even with strong ambient light. Combined with touchscreen technology, this provides an intuitive and straightforward user interface.





K-LASER™ **CUBE*** HIGH POWER LASER

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
3079KIT-USA	K-Laser CUBE 3 15W-ISP - 12W-CW - 3 wavelengths
3080KIT-USA	K-Laser CUBE 4 20W-ISP - 15W-CW - 4 wavelengths
3081KIT-USA	K-Laser CUBE 4 PLUS 20W-ISP - 15W-CW - 4 wavelengths

STANDARD ACCESSORIES (INCLUDED WITH K-LASER CUBE 3 & 4, OR 4 PLUS)

MP542-USA	White Sock, Chattanooga, K-Laser CUBE 3
MP543-USA	Black Sock, Chattanooga, K-Laser CUBE 4 & 4 Plus
EG254481	Interlock Connector
MP443-USA	Optical fiber handpiece
MP486-USA	Zoom optical, K-Laser CUBE 3 & 4 only
MP554-USA	Zoom optical, K-Laser CUBE 4 Plus only
MP513-USA	Distal piece
PF002P-USA	Goggles
MP503-USA	Dark goggles
MP130GC-USA	Warning sign
13-00170-US	Operating manual
E6254473-USA	Power supply
MP111B-USA	Power cord, USA/Canada

OPTIONAL ACCESSORIES

MP041P-USA	ENT handpiece
MP475-USA	Optical Plus, 40mm
PF094-USA	Trolley
PF115-USA	Extend Plus and Trolley
IM017A-USA	Transport case
MP478-USA	Child goggles
PF067-USA	K-Laser CUBE 4 wireless foot pedal (on special order)

+All K-Laser CUBE lasers are covered by a 2 year warranty on every default workmanship and components including the source (Laser diodes). K-Laser CUBE 4 Plus is covered by an extended warranty of 5 years on the source (Laser diodes). SEE IFU FOR FURTHER DETAILS



Paul Hagopian - President
 M (480) 826-4969
phagopian@pctmedicalservices.com
pctmedicalservices.com