Mectronic

iLUX PLUS

Mectronic

THE EVOLUTION OF LASER THERAPY

Since 1986 Mectronic has been designing and manufacturing devices for physical therapy; **over 15000 laser systems produced have ensured its leadership in terms of know-how and experience in the therapeutic laser sector.**

Mectronic has achieved important goals starting with the first surgical lasers and CO_2 lasers, the result of the collaboration between its team and research centers, universities, national and international institutes.

Mectronic has always stood out for **technological innovation,** bringing forward the main technical and applicative laser innovations for therapeutic purposes by years: from the first use of the Nd:YAG laser in therapeutic mode, to the use of semiconductor laser sources, from the first three-wavelength laser up to the first broadband 1064nm semiconductor laser system, with more efficient therapeutic effects and with low energy consumption. From then until now, this path has led to the production of ever more efficient devices, with new features and compact dimensions.

The last laser signed by Mectronic is **iLux PLUS**, a platform able to offer numerous settings and emissions for flexible and effective therapy. Thanks to the interactive software and the color touchscreen it has never been easier to set up the therapy.

TECHNOLOGICAL KNOW-HOW

10
PATENTS

67
COUNTRIES

23.000
DEVICES PRODUCED

With more than 40 years of experience Mectronic is one of the main European manufacturers of physiotherapy equipment and medical lasers, as well as partner of numerous and important universities and research centers.

The continuous technological innovation, constant scientific research and collaborations with leading industry experts, have guaranteed Mectronic safe and innovative therapies for the physical recovery of the patient.

40 YEARS OF INNOVATION

1982
MECTRONIC IS FOUNDED

Engineer Gian Carlo Aloisini founds Mectronic together with other partners.

1984
THE FIRST LASER

Design and production of the first super-pulsed semiconductor laser system.

1985
THE FIRST SCANNER LASER

Mectronic designs and builds the first Scanner Laser available in four different configurations: He-Ne, GaAs, CO_2 and Nd:Yag.

1986
THE FIRST THERAPEUTIC ND:YAG LASER IN THE WORLD

Mectronic designs the first Nd:Yag laser in the world with continuous emission for physical therapy.
High-power laser therapy is born.

1997
FP3 SYSTEM

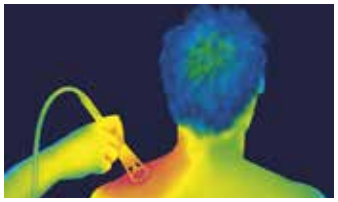
Mectronic designs, patents and produces the world's first three-wavelength semiconductor laser (FP3 System).

2005
MORE THAN 3000 LASERS INSTALLED ALL OVER THE WORLD

Mectronic sold **3000** lasers worldwide.

2007
TEMPERATURE CONTROL

Mectronic patents the first system to measure, process and monitor skin temperature during treatments.



2009
E²C: PATENTED STOCHASTIC EMISSION

Mectronic creates and patents the innovative stochastic emission mode with low thermal impact that generates laser pulses which vary in terms of duration and intensity.

2010
CHELT THERAPY

Chelt Therapy is born; a synergy between three-wavelength high-power laser therapy and dry cryotherapy at -35 °.

2012
iLux

Mectronic launches iLux on the market: the lightweight, powerful and compact Polymodal HEL Laser Therapy device.

2017
THEAL THERAPY

Mectronic patents and presents the innovative THEAL THERAPY:

Temperature controlled
High
Energy
Adjustable multi-mode emission
Laser

2020
NEW PRODUCTS

Mectronic presents the new range of products for laser therapy, Tecar therapy and Chelt Therapy.

YOUR PARTNER IN SPORTS

Whether it is prevention, injury treatments or physical performance improvement, Mectronic devices are available for the major medical and physiotherapy operators who take care of the professional athlete.

MECTRONIC MEDICALE IS THE OFFICIAL PARTNER OF:

TECHNICAL SUPPLIER
MEDICAL EQUIPMENT

Mectronic
FORNITORE UFFICIALE
ATALANTA B.C. 2019/20

VOLLEY LUBE

FORTITUDO BASKET

FIC

VOLLEY BERGAMO

THE VOLLEYBALL FEDERATION OF RUSSIA

FINP
FEDERAZIONE ITALIANA NUOTO PARALIMPICO

ILUX PLUS AND PHYSIOTHERAPY: A PERFECT DUO

Today laser therapy is widespread worldwide.
Thanks to many international scientific researches, Mectronic has developed **iLux PLUS**, a device that has proven its effectiveness in improving the lives of patients.
Thanks to the ability to customize the laser beam characteristics **iLux PLUS** allows optimizing therapeutic results, by quickly curing various pathologies.

SCIENTIFIC **RESEARCH**

Mectronic collaborates with various institutes and universities in order to certify the beneficial effects of the therapeutic methods developed.

The scientific research staff focuses on an in-depth analysis of the therapeutic application of various biophysical stimulations in musculoskeletal diseases.

In particular, scientific research is almost completely lacking in studies regarding specific clinical trials in the face of a progressive wide clinical use of high-tech therapies.

This lead to prospective randomized clinical trials to analyze the short and long term clinical effects of the laser.

SCIENTIFIC **STUDIES**

"TEMPERATURE CONTROLLED HIGH ENERGY ADJUSTABLE MULTI-MODE EMISSION LASER THERAPY IN THE TREATMENT OF THE CHRONIC LOW BACK PAIN"

Notaricola A, Solarino G, Covelli I, Rifino F, Moretti B. | Epub 2018 Jan 2

"SHORT-TERM EFFECT OF SHOCKWAVE THERAPY, TEMPERATURE CONTROLLED HIGH ENERGY ADJUSTABLE MULTI-MODE EMISSION LASER OR STRETCHING IN DUPUYTREN'S DISEASE: A PROSPECTIVE RANDOMIZED CLINICAL TRIAL."

Notarnicola A, Maccagnano G, Rifino F., Pesce V., Gallone MF, Covelli I., Moretti B. | Epub 2017 Jul-Sep

"TRI-LENGTH LASER THERAPY ASSOCIATED TO TECAR THERAPY IN THE TREATMENT OF LOW-BACK PAIN IN ADULTS: A PRELIMINARY REPORT OF A PROSPECTIVE CASE SERIES"

Osti R, Pari C, Salvatori G, Massari L. | Epub 2014 Nov 7

WHY CHOOSE iLux PLUS?

The result of Mectronic's 40 years of technical know-how, today **iLux PLUS** represents a reference point for laser therapy.

360 ° REHABILITATION

iLux PLUS is able to offer a wide range of settings and customizations, effective therapy for every need.

LIGHTWEIGHT AND PORTABLE

Thanks to **iLux PLUS** the operator can rely on a lightweight and portable device, without compromises in terms of quality and safety.

PRECISION AND RELIABILITY

The advanced technology of **iLux PLUS** guarantees power, accuracy and effective treatment for all therapeutic needs.

AN INTERACTIVE EXPERIENCE

The touch-screen guides the user through therapy management in a simple and intuitive way; effective from the very first use.

HIGH-POWER
LASER

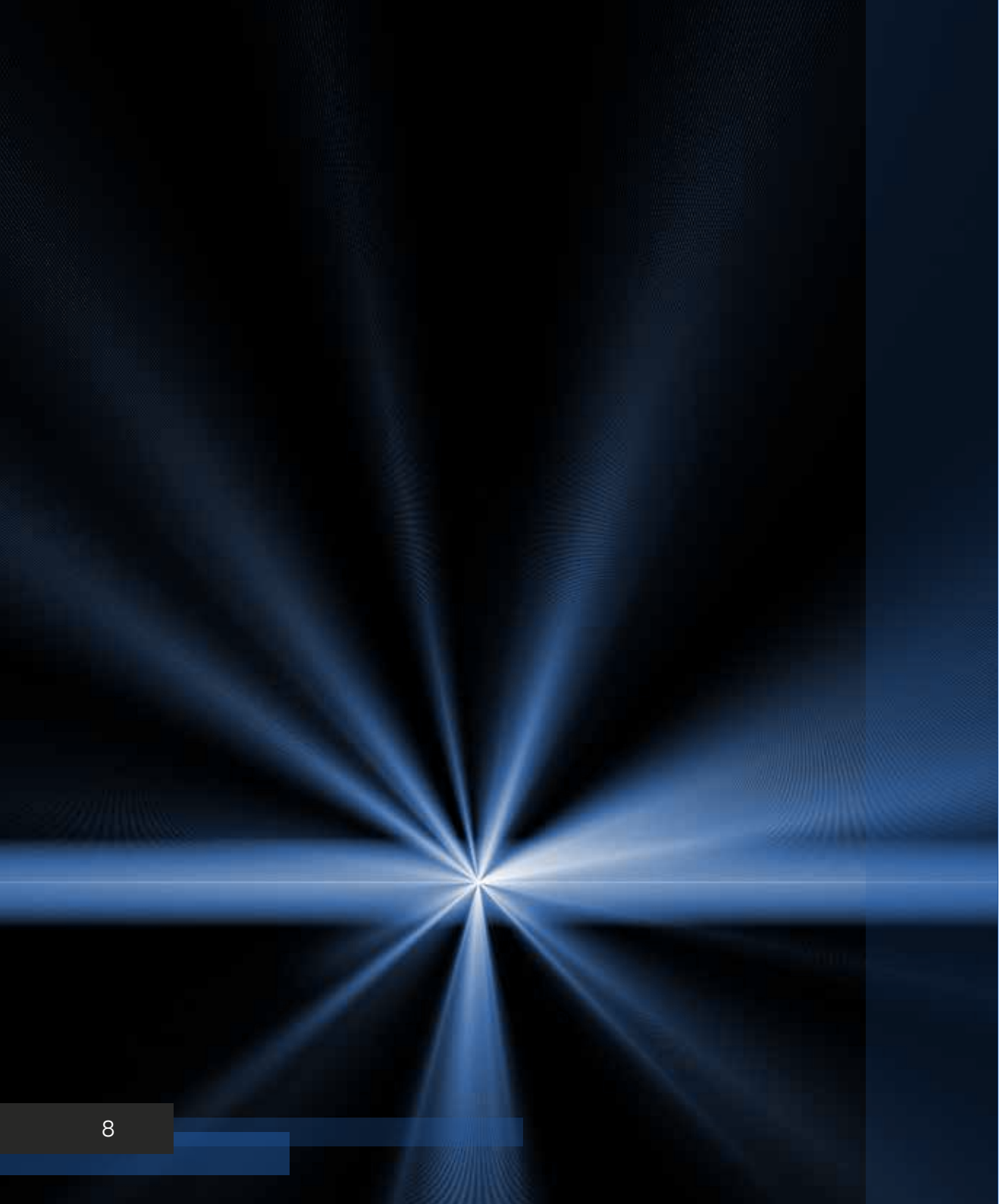
WAVELENGTH:
EFFICIENCY AND
SYNERGY

13 EMISSION MODES
IN ONE LASER

LIGHT BLADE HPS
HANDPIECE

PATHOLOGY
LIBRARY

SCANX



HIGH-POWER LASER

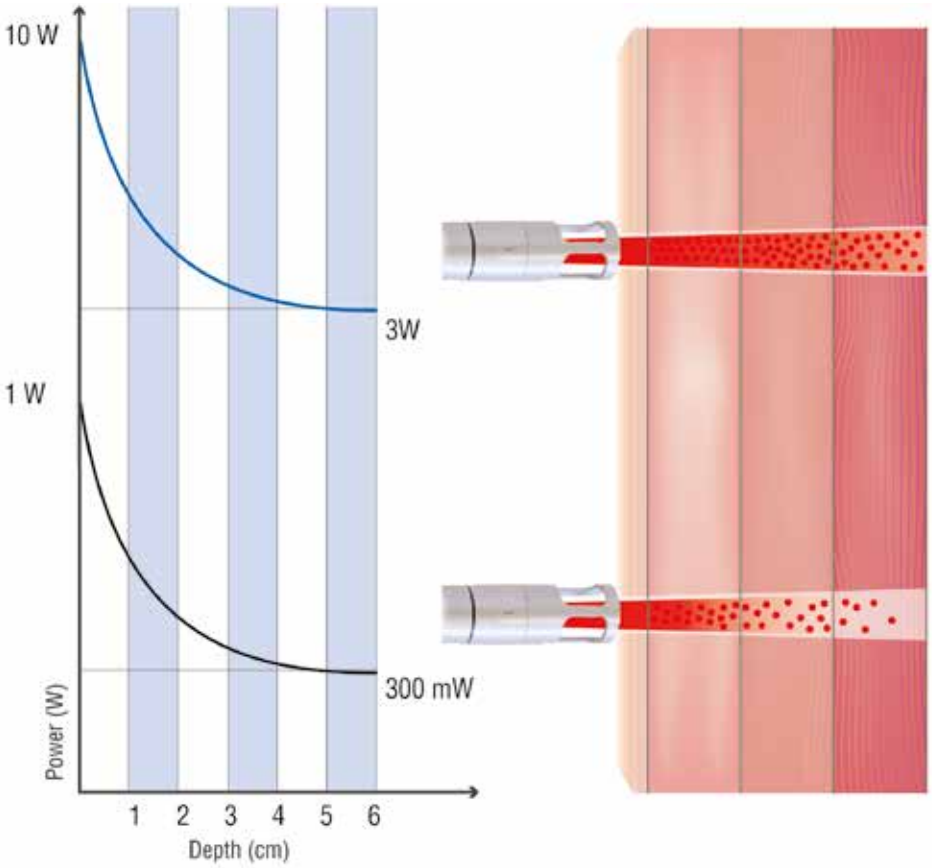
Therapeutic efficacy and depth of action

Many of the diseases that affect the musculoskeletal system are located in depth. When the cause of the disease is located so deeply, it is very difficult to intervene to relieve the pain. Laser Therapy becomes essential in these cases: its beneficial effects ensure optimal physical recovery.

An advantage of **MHEL Therapy (Multi-mode High Energy Laser)** is the ability to penetrate **deeply** and remove the root causes of the disease. This feature is available thanks to the two properties of the laser: **wavelength** and **power**.

As well known, the different wavelengths have different diffusion and absorption properties by biological tissues therefore it is possible to choose the most suitable wavelength for each therapeutic goal.

The emission power also amplifies the efficacy of the laser beam, by deeply conveying its beneficial effect. The greater power is transferred to biological tissues, the greater the energy conveyed to the tissue lesion.
Power is therefore the main vector of energy transfer.



Interaction between power and depth

The ability of the laser beam to penetrate deeply is erroneously attributed to the wavelength alone. But power also plays an essential role in the action of the therapeutic laser on tissues.

It is known that power (Watt) represents the amount of energy that can be transferred in a fraction of time. (1 Watt = 1 Joule per 1 second). However, the energy is diminished in an inversely proportional manner with respect to the reference depth.

Higher powers convey more energy by preventing the natural dispersion of the laser beam and reaching the "fulcrum" of the trauma (see diagram).

The more energy is transferred, the greater the quantity that can be assimilated by biological tissues.

WAVELENGTH:

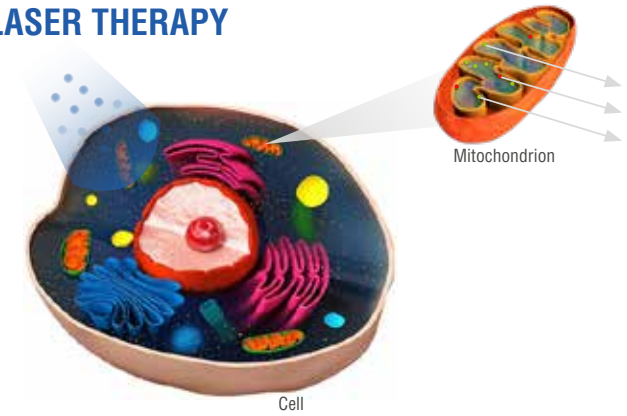
EFFICIENCY AND SYNERGY

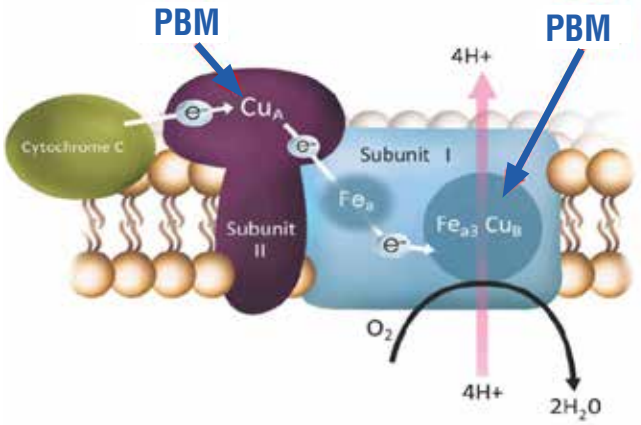
The ability of laser light to penetrate deeply is very important but not sufficient, in fact as the first law of photochemistry states *"Light must be absorbed before photochemistry can occur"*, the ability of the laser light to interact and be absorbed by biological tissues is much more important.

All wavelengths within the therapeutic window (600nm - 1100nm) allow interacting with biological tissues by triggering photobiomodulation processes, but it has been shown that some of them are much more efficient. Science has proven that the main cellular chromophore of photobiomodulation is *Cytochrome C Oxidase*; this is an enzyme found in mitochondria, cellular organelles present inside every cell of the human body.

Many recent scientific articles have shown how visible laser red light such as that at *650nm*, and laser light in the *800nm - 850nm* range, are those most absorbed by Cytochrome C Oxidase, triggering photobiomodulation in the best possible way.

LASER THERAPY





“Light must be absorbed before photochemistry can occour”

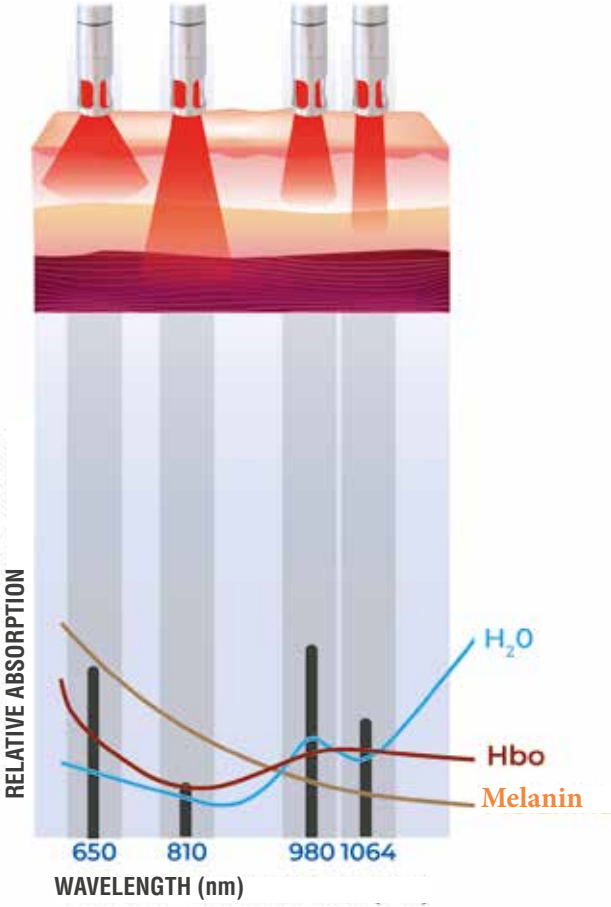
Among the wavelengths emitted by the major laser therapy devices there are also 980nm and 1064nm. These two wavelengths, even if less absorbed by Cytochrome C Oxidase, have other features that allow optimizing the therapeutic results triggered by photobiomodulation.

Both wavelengths, in particular 980nm, are absorbed by water and allow generating an excellent photothermal and photomechanical effect when the emission is based on pulse waves.

Moreover, thanks to greater penetration depth compared to 980nm and the lower scattering, the 1064nm wavelength has a more directional action and greater energy density with the same power.

The 980nm and 1064nm wavelengths allow optimizing the action on the thermoreceptors and mechanoreceptors and, if associated with the E²C mode they guarantee the right interaction with the peripheral nervous system, enabling the Gate Control mechanism for a quick analgesic effect.
Thanks to these features the two wavelengths allow triggering additional metabolic pathways that can act in some cases simultaneously with those triggered by photobiomodulation.

iLux PLUS is available in different power and wavelength configurations from 650nm to 1064nm, with one or two wavelengths and with powers up to 30W to best meet the needs of the therapist and experts in the field and optimize the therapeutic effects.



MHEL THERAPY

13 emissions in one laser

Therapeutic lasers are an important resource for physiotherapy and their effectiveness becomes an essential requirement when it comes to choosing between the various proposals on the market. We are aware that the therapist must be able to fully treat acute and chronic diseases, always guaranteeing the best possible result.

This is why Mectronic has implemented multiple emission modes in a single laser, increasing its effectiveness. The method has evolved and today we can speak of a unique, flexible treatment that is always in line with therapeutic needs: **MHEL Therapy (Multi-mode High Energy Laser)** is an exclusive product signed by Mectronic.

A simple setting allows choosing between **13 emission modes**, each different in terms of benefits and characteristics of the laser pulse. This range of possibilities offers the certainty of treating patient's acute and chronic problems in the best possible way.

CONTINUOUS **mode**

E²C

ANTINF **mode**

CUSTOM **mode**

DIMMER

HPM

SINGLE PULSE

PULS 1, PULS 2, PULS 3 **mode**

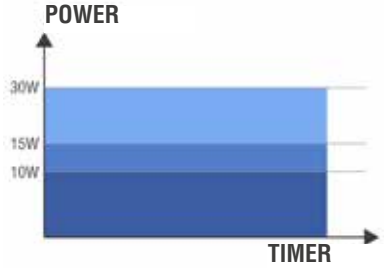
BURST **mode**

PBM **mode**

THP **mode**

CONTINUOUS **EMISSION MODE**

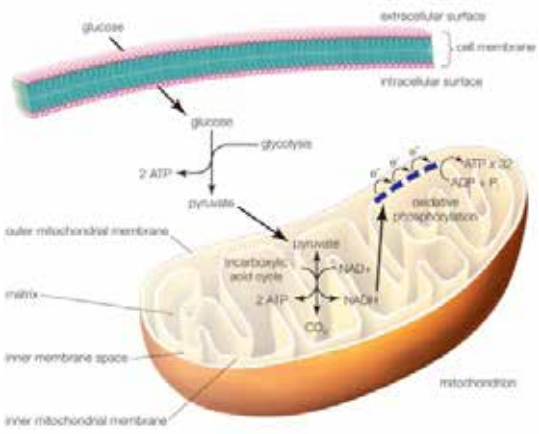
To enable the deep biostimulation processes



Among the multiple emission modes of **iLux PLUS** we find the **CW** mode **with continuous wave emission**. This type of laser emission is able to trigger cell biostimulation processes increasing the ATP production.

The continuous emission mode is recommended for those diseases where the lesion is deep; the ability to activate cell reactivation processes allows for a rapid biostimulation effect from the first sessions.

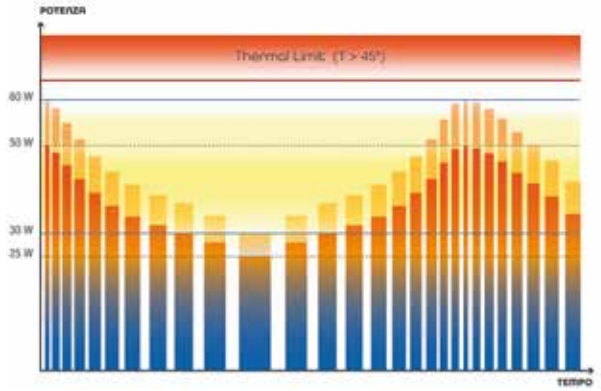
Scientific studies on the effects of laser therapy have proved that a laser pulse must have duration of at least 100 ms to enable cell biostimulation. So only a continuous pulse (or pulsed that follows an emission of at least 100 ms) has the ability to generate an effect at the tissue level, thus contributing to the regeneration of cellular biological balance. The cell stimulated by the laser beam begins "recharging" itself with energy returning to its primary physiological function. The continuous emission mode is therefore fundamental to trigger a **tissue regeneration process**, accelerating recovery times.

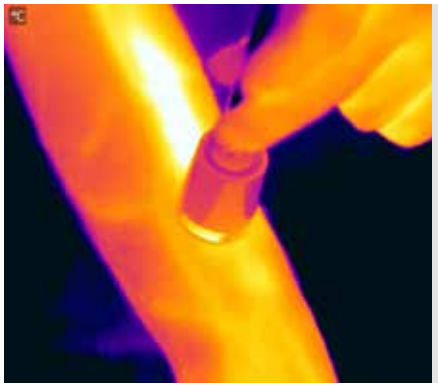


MHEL THERAPY

STOCHASTIC E²C MODE

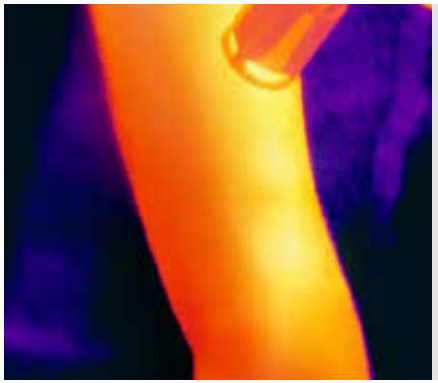
Naturally thermal mode emission





CONTINUOUS (CW)
EMISSION MODE

Captured with thermal imaging camera



EMISSION WITH
E²C

Captured with thermal imaging camera

iLux PLUS features the **E²C** laser emission system patented by Mectronic.

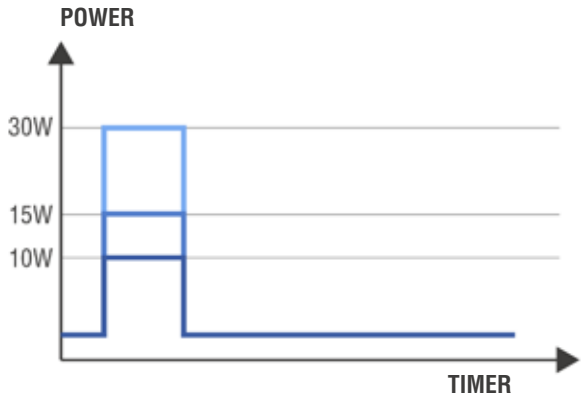
The stochastic E²C emission generates variable laser pulses in terms of power and duration; this particular way of delivering energy interacts in a correct manner with the peripheral nervous system.

The **"naturally thermal" emission** combined with the thermo-mechanical action on the peripheral receptors, allows rapid polarization of the nociceptive pathways, polarizing the A-delta fibers, and fighting against the pain coming from the noxa through the Gate Control.

The **analgesic action** results in a strong pain relief from the first applications without any side effects.

SINGLE PULSE

Accuracy and depth

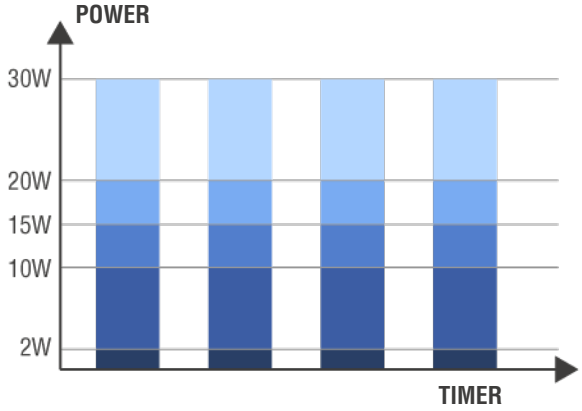


The laser emission is concentrated in a single high-energy pulse whose dosage is accurate and effective.

In order to guarantee greater effectiveness, the amplitude of the single pulse can be adjusted by the operator to always offer a targeted action.

PULSED MODE

Regular and modulated pulses

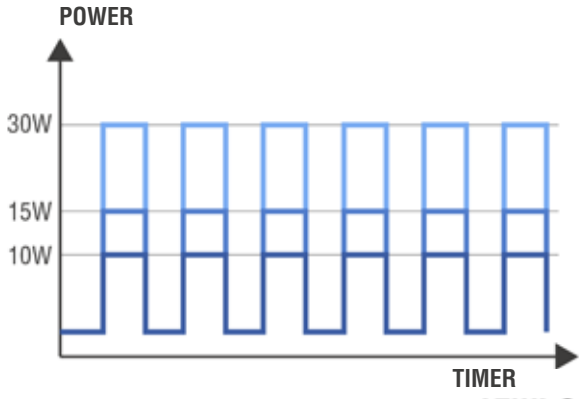


3 different modes to adjust therapy in the acute phase, optimizing the pro and anti-inflammatory action, while increasing biostimulation with less thermal impact. These modes allow optimizing the laser emission according to skin type.

MHEL THERAPY

BURST MODE

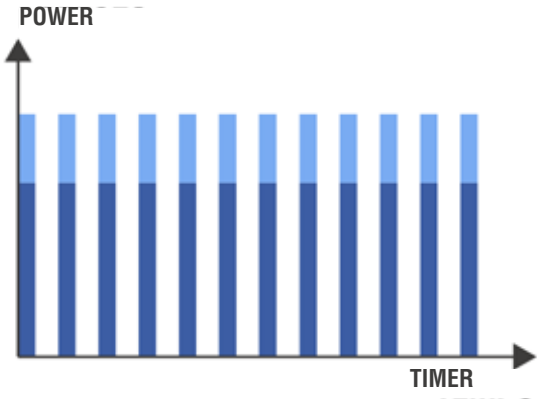
High intensity pulse train



This mode is particularly recommended for relapsing diseases with predominant chronic pain. The pulse trains allow rapid interarticular neoangiogenesis action and restoring cellular homeostasis.

ANTINF

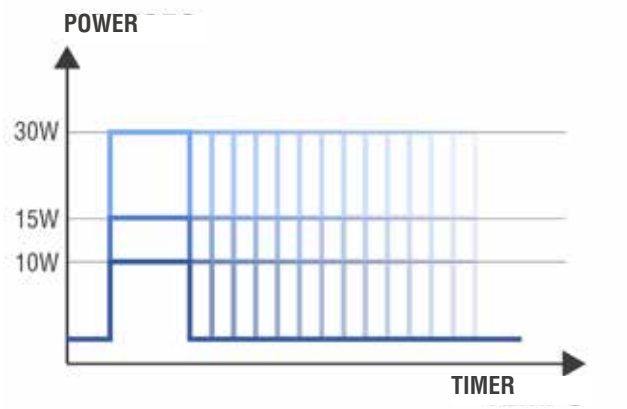
Against inflammation



Pulsed mode with specific setting for anti-inflammatory action. The nitric oxide release process is fundamental for re-balancing the microcirculation. A controlled vasodilation allows the neoangiogenesis process to ensure the reactivation of the lymphatic peristalsis and the collection of the catabolites of the inflammatory cascade.

CUSTOM **MODE**

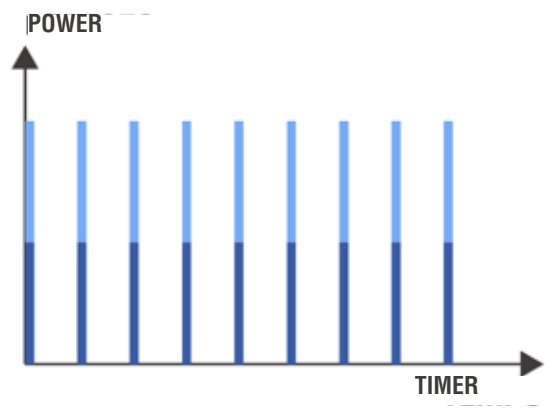
To design your own emission



The answer to requests for increasingly quantized and harmonized energy is represented by the Custom emission mode.
It is possible to customize the emission by means of the Duty Cycle and Frequency parameters, allowing you to "design" the pulsed and super-pulsed mode based on the characteristics of the therapy.

HPM **MODE**

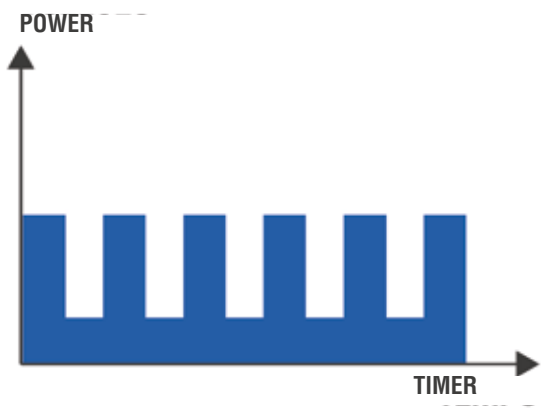
The high intensity pulse mode



The high intensity mode (High intensity Pulse Mode) emits short-duration pulses distinguished by high peak power, while limiting the thermal effects on the tissues.

DIMMER **MODE**

Biostimulation and analgesic effect

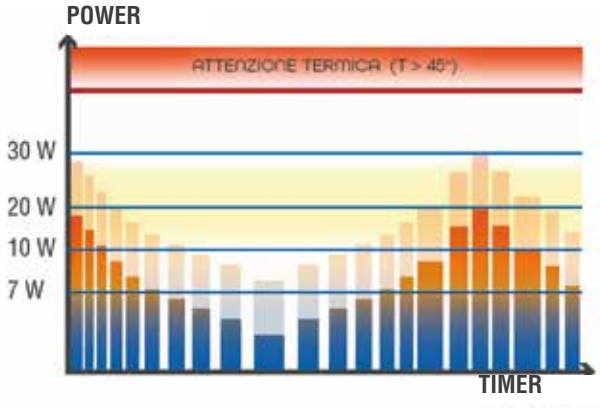


The innovative Dimmer mode allows combining the biostimulation effect of the continuous mode with the analgesic effect of the pulsed mode in a single emission mode.

MHEL THERAPY

PBM MODE

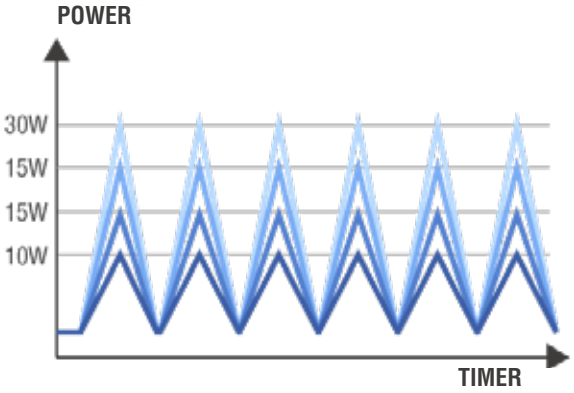
Optimize photobiomodulation



The innovative **PBM** mode is a stochastic emission mode designed to maximize photobiomodulation while respecting emission times and dark periods highlighted in many scientific researches.

THP

Pro and anti-inflammatory action



The **THP** (Triangular High Peak) mode is a pulsed mode characterized by a variable trend of the power delivered. The power rapidly increases and decreases in a triangular trend. This mode allows adjusting the therapy in the acute phase by optimizing the pro and anti-inflammatory action.

EFFECT

THERAPY

ANALGESIC **EFFECT**

A fast pain reduction without side effects: thanks to the innovative emission modes, **iLux PLUS** allows modulating the energy to quickly fight muscle and joint pain.

ANTI-INFLAMMATORY **EFFECT**

iLux PLUS modulates inflammatory processes thanks to the deep biological tissue stimulation, triggering vasodilation, increasing the supply of oxygen and thus enabling the main metabolic processes.

BIOSTIMULATION **EFFECT**

The **iLux PLUS laser** supports cellular energy processes, increasing tissue remodeling by stimulating the production of collagen.

ANTI-EDEMA **EFFECT**

iLux PLUS stimulates the neoangiogenesis process in the tissues. The production of new vessels has a balancing effect in post-trauma and hemolymphatic peristalsis by restoring microcirculation and the collection of excess fluids produced by inflammatory phenomena.

CONTRACTURE-RELIEVING **EFFECT**

iLux PLUS modulates the release of oxygen from oxygenated hemoglobin. The perfusion of oxygen in the contracted muscle tissues solves the topical problems of ischemia and hypoxia by favoring muscle fibers relaxation.

TREATMENT MANAGEMENT

MecOS 5.0 Software: therapy innovation

PATHOLOGY **LIBRARY**

The library includes over 70 pathologies with relative interactive protocols, subdivided by phase. The software also offers immediate graphical feedback, which shows power, time and effective energy supplied by the system.

A TARGETED SOLUTION

The need for correct dosimetry requires the control of the energy transferred to tissues. Compared to similar devices **iLux Plus** guarantees greater therapeutic efficiency due to the software accuracy level.

Thanks to the new features of Mec Os 5.0 Real-Time software, it is possible to enter the precise size of the area to be treated, ensuring the correct therapeutic dose. Therefore Mectronic provides a useful tool to facilitate the data entry in the treatment area.

TREATMENT GUIDE

The pathology library includes a protocol dedicated to each of the pathologies, both acute and chronic.
The images clearly show how to treat the patient.

TIME/JOULE MODE

iLux PLUS can set the emission according to the time and energy parameters. The operator can indicate the therapy time and **iLux PLUS** will stop delivering the energy when the set therapy time is reached.

Joule mode allows the operator to set the energy dose of the therapy; delivery will end when the set value is reached.

TRIGGER POINT MODE

This mode allows treating the Trigger Points: you set the dose in Joules for each point and an acoustic signal alerts the operator when the set dose is reached, thus allowing you to switch to the treatment of another Trigger Point.

THE FUTURE IS IN YOUR HANDS

Therapy control has never been easier

The enabling and control of the therapy are strictly connected to the handpiece and applicators.
This is why Mectronic has redesigned the ergonomics and functionality of the handpiece for an easier and more efficient therapy.

The innovative ultra-compact and ergonomic Light Blade handpiece is created.

Light Blade allows the operator to enable the laser emission directly from the handpiece by pressing the new and practical **finger switch**.

SENSOR
TO CHECK THE PRESENCE OF THE APPLICATOR

FINGER SWITCH
TO CONTROL THE LASER EMISSION DIRECTLY FROM THE HANDPIECE

MAGNETIC ATTACHMENT
TO EASILY CHANGE THE APPLICATOR

APPLICATORS

An applicator for each treatment

Ligth Blade features a vast set of patented applicators in order to meet every therapeutic need.

INCLUDED

Plus small applicator

Plus large applicator

OPTIONAL

Plus small spherical applicator

Plus variable focus applicator

Plus Fixed focus applicator

Plus ENT applicator

PRECISION AND CONTROL: THE BASIS OF A
CORRECT THERAPY

Mectronic has equipped its devices with a **calibration** system to always check the actual laser emission; the calibration is accurate, as it is carried out directly at the exit of the handpiece (according to IEC EN 60601-2-22).

Those who choose **iLux PLUS** know that the correct therapy is also the result of the awareness of the device used: precision and control must not be a compromise.

Another safety system of **iLux PLUS** is the **temperature control** on the laser head, to always check its correct operation.

Practical and functional accessories

iLux PLUS features practical patented magnetic attachment spacers: they are applied with a simple gesture, as does the ScanX conical applicator.

SCANX

MODE (OPTIONAL)

Optimize time

Thanks to the patented magnetic conical applicators **iLux PLUS** can easily be used as an independent laser operator.
You can change the mode with a simple gesture. Flexibility, practicality and high therapeutic performance: **iLux PLUS** is the ideal partner in your daily practice.

Safety button

The ScanX mode allows for the patient to interrupt therapy during treatment thanks to the innovative and practical safety button.

Conical applicator

The **ScanX** applicator is made of special biomaterial, perfectly tolerated by the patient.

"Sara Loda, Italian volleyball player, spiker and captain of Volley Bergamo (Serie A1) during a treatment with iLux Plus in ScanX mode"

MODELS

MODEL	WAVELENGTH	POWER
ILUX LF HPS D10	810 nm + 980 nm	10W
ILUX LF HPS D15	810 nm + 980 nm	15W
ILUX LF HPS D20	810 nm + 980 nm	20W
ILUX LF HPS D30	810 nm + 980 nm	30W
ILUX LF HPS Y10	1064 nm	10W
ILUX LF HPS Y15	1064 nm	15W
ILUX LF HPS Y20	1064 nm	20W
ILUX LF HPS Y30	1064 nm	30W
ILUX LF HPS V10	810 nm + 1064 nm	10W
ILUX LF HPS V15	810 nm + 1064 nm	15W
ILUX LF HPS V20	810 nm + 1064 nm	20W
ILUX LF HPS V30	810 nm + 1064 nm	30W
ILUX LF HPS R2	650 nm	2W
ILUX LF HPS R3	650 nm	3W
ILUX LF HPS R4	650 nm	4W

iLux PLUS **650**

iLux PLUS **1064**

iLux PLUS **810+980**

iLux PLUS **810+1064**

TECHNICAL SPECIFICATIONS

SOFTWARE	Mectronic's own MecOS 5.0 Real-Time Operating System
WAVELENGTH	650 nm, 1064 nm, 810 nm + 980 nm and 810 nm + 1064 nm
GUIDE LIGHT	650 nm - up to 3 mW
LASER POWER	Up to 30 W
ISSUE	13 emission modes: - Continuous (CW) - Pulsed (PULS 1, PULS 2, PULS 3) - Burst - E^2C (patented stochastic mode) - Antinf - Custom - HPM - Single pulse - Dimmer - PBM - THP
WORK MODE	- Manual - Single Pulse - Burst - Custom mode
SPECIAL MODES	- Joule - Timer - Trigger Point
EFFECT MODES	Protocols to maximize the main effects: - Biostimulant - Anti-inflammatory - Contracture-relieving - Anti-edema - Analgesic
SCANX AUTOMATIC MODE	ScanX automatic mode (Optional)
PROTOCOLS	- Over 150 preset protocols - Ability to create customized protocols
DISPLAY	10.1" HD IPS color display with capacitive touch screen
CALIBRATION	Display and acoustic control system for laser emission at handpiece exit according to IEC EN 60825-1
POWER SUPPLY	100÷240V 50÷60Hz

ABSORPTION	160 VA
DIMENSIONS	- *CASE*: 295 x 265 x 150 mm - *WITH TROLLEY:* 516 x 516 x 1017 mm
WEIGHT	- *CASE:* 5 Kg - *WITH TROLLEY:* 24 Kg
LASER CLASS	IV
BEAM DIVERGENCE	25°
PULSE WIDTH	1-1000 ms
IP CLASSIFICATION	Device: IPX0 Handpiece: IPX0 Pneumatic footswitch: IPX4
OPERATING CONDITIONS	10°C ÷ 30°C 30 ÷ 75% non-condensing humidity 700 ÷ 1060 hPa
TRANSPORT AND STORAGE CONDITIONS STORAGE	-10 ÷ 55°C 10 ÷ 100% non-condensing humidity 500 ÷ 1060 hPa
MPE	Maximum permissible exposure on skin 5600W/m^2
MPE	Maximum permissible exposure on cornea 9W/m^2
NOHD	Nominal Ocular Hazard Distance 2,4m
COMPLIANCE	EN 60601-1; EN 60601-1-2; EN 60601-2-22
CERTIFICATION	CE0051
DIRECTIVE 93/42	IIb Classification
WARRANTY	2 YEARS

ACCESSORIES INCLUDED

Code 20AP.HPS.PI

PLUS small applicator
Ø 23 mm

Code 20AP.HPS.GR

PLUS large applicator
Ø 37 mm

Code 30METRO-MM

Tape-measure (with Mectronic logo)

Code 30CL.PLS-L

PLUS trolley, Laser version
For device and accessories
516 x 516x 840 mm

*Code 50OC.LV+B **

N°2 Safety goggles 651-MTM

Code 20PE.PNEUM

Pneumatic Footswitch

Code 20PE.LZR.C+P

Pneumatic Footswitch with cover

Code 50WI.AL2MT-IT

Power cord
with Italian plug

Code 30ST.LAMP-MM

Laser warning sign with Flashing light

Code 20CO.INT3P

3-pole Interlock

** the code refers to 1 unit*

OPTIONAL ACCESSORIES

Code 20AP.HPS.ZOOM

PLUS variable-focus applicator

Code 20AP.HPS.SPH.P

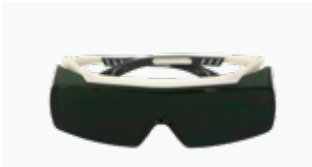
PLUS Small spherical applicator

Code 20AP.HPS.ENT

PLUS ENT applicator

Code 20AP.HPS.FXFCS

PLUS fixed focus applicator



Code 30OC.LS+C

Special safety goggles 659 for red laser light

Code 30BO.F-MM

NYL flex protective bag for device transport

Code 30BO.R-MM

Rigid protective bag For device transport

Code 50WI.AL2MT.SCH

Power cord With Schuko plug

Code 30WI.AL90.SCH

Power cord with 90° Schuko plug

SCANX OPTIONAL ACCESSORIES

Code 20AP.HPS.ENT

ScanX small conical applicator For PLUS hanpiece, Ø 70 mm

Code 20AP.HPS.C120

ScanX large conical applicator For PLUS hanpiece, Ø 120 mm

Code 30BR.SCANX.XP

ScanX arm with magnetic coupling conical holder

Code 30WI.PPAZ

Patient safety button For therapy interruption

Code 20SW.SCNX.PL

ScanX automatic mode software update For iLux PLUS

BIBLIOGRAPHY

1. P.F Parra, *"I laser ad Argon e Neodimio Yag nella pratica clinica"*, Torino, Edizioni libreria cortina, 1991.
2. Castellacci E., Ciuti F., Conforti M., Di Domenica F., *"Il Nd:YAG e La terapia Laser ad Alta Energia"*, Bologna, Edizioni Martina, 2003
3. Magni Luca, *"Laser therapy and basketball 2001, Laser & Technology"*, Giugno 2002, 24-29
4. Miglio D., *"Use of high power neodynium yag laser and fcz laser in the treatment of pubalgia, Laser & Technology"*, Maggio-Dicembre 2001, 46-48
5. Benedini M., Conforti M., *"High Power Neodimium-Yag Laser therapy in the treatment of muscle lesions without hematomas in athletes, Laser & Technology"*, Maggio-Dicembre 2001, 49-51
6. Gualtieri E., *"Laser Treatment of Muscle Lesions, Laser & Technology"*, Gennaio-Agosto 2003, 35-39
7. Clavel D.H., *"Laser De Alta Potencia"*, AKD, 2006, 2-7
8. Clavel D.H., Facundo C., Leoni C.A., *"Terapia FP3 (Laser de Alta Potencia) en lesiones musculares"*, 2008, 15-20
9. Tina Karu: *"Ten Lectures on Basic Science of Lasertherapy"* Prima Books AB Grängesberg, Sweden 2007

SCIENTIFIC STUDIES

1. "*Pain and electrophysiological parameters are improved by combined 830-1064 high-intensity LASER in symptomatic carpal tunnel syndrome versus Transcutaneous Electrical Nerve Stimulation"*, Casale R., Damiani C., Maestri R., Wells C.D., European Journal of Physical and Rehabilitation Medicine, 2012, 48:1-2
2. *"CHELT Therapy in the Treatment of Chronic Insertional Achilles Tendinopaty"*, Notarnicola A., Forcignanò M., Fiore A., Moretti B., UO di Ortopedia e Traumatologia, Policlinico di Bari, Dipartimento di Neuroscienze e Organi di Senso, Università degli Studi di Bari, 2012
3. "Tri-length laser therapy associated to tecar therapy in the treatment of low-back pain in adults: a preliminary report of a prospective case series", Osti R, Pari C, Salvatori G, Massari L., Epub 2014 Nov 7
4. "Tri-length laser therapy associated to tecar therapy in the treatment of low-back pain in adults: a preliminary report of a prospective case series", Osti R, Pari C, Salvatori G, Massari L., Epub 2014 Nov 7
5. "Temperature controlled high energy adjustable multi-mode emission laser therapy in the treatment of the chronic low back pain", Notaricola A, Solarino G, Covelli I, Rifino F, Moretti B. Epub 2018 Jan 2

www.mectronicmedicale.com

MECTRONIC MEDICALE s.r.l.
via Orio al Serio 15,
24050 Grassobbio (BG) - ITALY
Tel: +39 035656080 | Fax: +39 035657361

Follow us:

Mectronic Medicale srl - BR_EN_LPF_Brochure Estesa_2021-01_001

www.mectronicmedicale.com | info@mectronicmedicale.it