

**hiC**  
HEALTHCARE







## A proper choice always starts from the trade-mark.

Each item is the result coming from the know-how and the technological approach belonging to the company who is doing manufacturing. This is why all people before purchasing a product is placing his confidence into the manufacturer. PAGANI, established in 1947, is the oldest Italian manufacturer of Physiotherapy devices, the first company all over the World into the physiotherapy field getting ISO 9001 certificate.

Costant innovation, new solutions, co-operation with the Physicians and Physiotherapists, distributed into more than 30 countires all over the world, PAGANI is continuing to improve quality and features of the widest range of units for getting customer's satisfaction.

Windows CE is granting versatility, up-grading, using of the most useful applications.



*Wide range of pre-set protocols with body-pictures*



*Unlimited number of free memories for customised protocols*



*Further to the traditional keys, a coloured touch-screen is available for making faster each operation.*

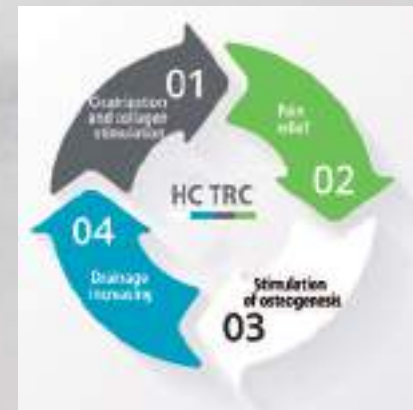
## ITALIAN DESIGN

The "Italian style" of each device is immediately visible and makes each device a very attractive device, being the pure expression of a stylistic concept where details have been studied and developed with care for providing each device with the highest solutions.

**EVOLUTED THECAR THERAPY:**  
the new and effective approach  
into the diathermy applications!

- Best results in few applications
- Dynamic Energy Transfer
- Unipolar and Bipolar applications

AGAINST PAIN AND INFLAMMATION FOR VERY FAST RECOVERY INTO THE ACUTE AND CHRONIC PATHOLOGIES THERAPY FOR RESISTIVE AND CAPACITIVE (TRC) DIATHERMY IS AN INNOVATIVE THERAPEUTIC APPROACH CAPABLE TO TRANSFER A SPECIAL ELECTROMAGNETIC ENERGY TO THE DIFFERENT CELLULAR LAYERS FOR PROVOKING HYPEREMIA AND BIO-STIMULATION BY STIMULATING ENDOGENOUS WARM. THE SPECIAL FEATURE OF TRC IS THE CAPABILITY TO MAKE WARM FROM INSIDE: ELECTROMAGNETIC ENERGY IS GENERATING WARM AND BIO-STIMULATION INTO THE HUMAN BODY. TEMPERATURE INCREASING AND THE RELEVANT INCREASING OF BLOOD FLOW, STIMULATES RECOVERY PROCESS OF THE DIFFERENT TISSUES. HC TRC IS USED FOR REDUCING PAIN AND ALSO INFLAMMATION INTO THE ACUTE AND CHRONIC PATHOLOGIES AND MAKING FASTER RECOVERY.



**From low temperature to high temperature for granting the best versatility!**

Further to the traditional continuous emission mode, TRC is also offering pulsed emission mode.

Pulsed emission mode is useful for performing treatments while warm is quite contraindicated, such as recent traumas, but also when vascular, dermatologic pathologies are treated.



*Bipolar modality*

**UNIPOLAR APPLICATIONS**

As usual for a thecartherapy, HC TRC is offering unipolar applications by using large neutral electrode and the Intereactive Probe.

Interactive Probe represents the biggest revolution into the thecar therapy field. PAGANI, first all over the World, introduced IP where all functions are displayed and the operator may set power from the relevant switches. IP is also offering the opportunity to keep the same electrode and shifting from Resistive to Capacitive or viceversa by using



the sophisticated electronic device. So, the operator doesn't lose time for changing electrode.

**BIPOLAR APPLICATIONS**

BIPOLAR application is allowing the operator to avoid neutral electrode and delivering energy locally where the electrode keeps in touch with the patient's skin. It is useful for treating small parts of the body, such as face (sinusitis, rinitis, wrinkles, stimulating collagen, etc.), cheloidis, for treating cellulite and oedema, vascular diseases.



*Treatment has been made with Bipolar hand-piece*

**BEFORE**



**AFTER**

## INTERACTIVE PROBE



### IP: Interactive Probe

IP has been exclusively developed from PAGANI for granting comfortable and safety massage, in respect with ergonomic shape of the hand. Everybody may handle the hand-piece with insulation and protection from electromagnetic field. IP is granting electronic switching from from capacitive to resistive and viceversa without changing the electrode. Over the coloured LCD of IP you may see all useful parameters such as temperature, intensity, impedance and modality.



**MCS: Magnetic Coupling System**

MCS has been studied exclusively from PAGANI for allowing coupling of each electrode to the Interactive Probe by using a special magnetic attraction, without any connector for making easier and safer every connection.

**DET: Dynamic Energy Transfer**

Dynamic Energy Transfer has been introduced for granting proper Energy to the patient with reference to temperature modifications and impedance over the patient.

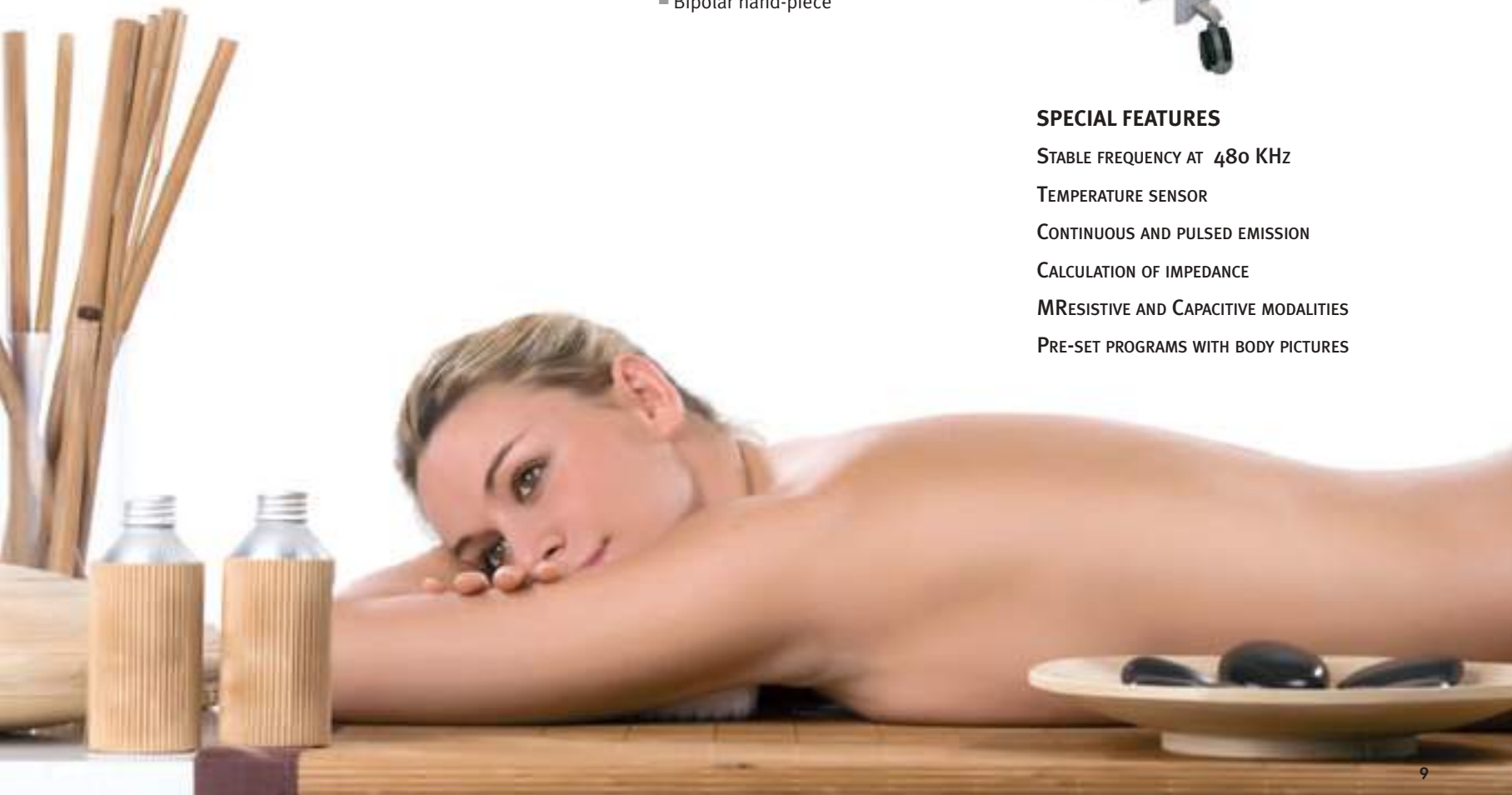
**Technical features**

- Frequency: 480 KHz +/- 10Hz
  - Emission: continuous and pulsed
  - Impedance: in real time
  - Temperature sensor
  - Power:
    - mod. HC TRC 180: max 180 W
    - mod. HC TRC 300: max. 300 W
  - Pre-set protocols with pictures
  - Free memories for storing customized protocols
  - Interactive Probe
- On inquiry:**
- Wheeled trolley with boxes
  - Bipolar hand-piece



**SPECIAL FEATURES**

- STABLE FREQUENCY AT 480 KHZ
- TEMPERATURE SENSOR
- CONTINUOUS AND PULSED EMISSION
- CALCULATION OF IMPEDANCE
- MRRESISTIVE AND CAPACITIVE MODALITIES
- PRE-SET PROGRAMS WITH BODY PICTURES



## HC CRYO T-SHOCK Revolutionary Innovation for a successfully therapy

THERAPEUTICAL DEVICE ALLOWING TO DELIVER BOTH COLD AND WARM ENERGIES. FROM  $-18^{\circ}$  TO  $41^{\circ}\text{C}$  HC CRYO T-SHOCK IS GRANTING A VERY FAST SWITCHING FROM COLD TO WARM FOR KEEPING IN TOUCH WITH THE DEEPEST TISSUES WHEN VASODILATION UNCONSTRICTION ARE EFFECTIVE.

PHYSIOTHERAPY, SPORT, VASCULAR MEDICINE INTO THE FIELD OF MEDICINE, NATURAL COLD AND WARM MAY ASSUME A STRAORDINARY INTEREST FOR REDUCING PAIN AND STIMULATING RECOVERY.

PARTICULARLY INTO THE TRAUMAS, COLD IS THE ONLY SUITABLE ENERGY THAT THE OPERATOR MAY USE.

OTHERWISE, THERMO-SHOCK MADE FROM VERY FAST SWITCHING FROM COLD TO WARM IS GRANTING VASOCOSTRICION AND VASODILATION FOR IMPROVING BLOOD CIRCULATION, REDUCING OEDEMA.

THIS IS WHY, THERMO-SHOCK IS USEFUL INTO THE TREATMENT OF CAPSULITIS, CONTRACTURES, TENDONITIS, BURSITIS, ARTHROSIS, LUMBAR AND SCIATIC SYNDROMES.

### AESTHETIC MEDICINE

CRYOLIPOLISIS REPRESENT THE MOST ADVANCED AND EFFECTIVE PROCEDURE FOR REDUCING UN-DESIRED FAT. NO COLLATERAL EFFECTS, HC CRYO T-SHOCK DOESN'T REQUIRE ENDOGENEOUS APPLICATIONS.

THE EFFECTS COULD COME AFTER 4 TO 6 WEEKS FOR PRODUCING THE BEST AFTER 2-3 MONTHS THANKS TO THE ELIMINATION OF FAT CELLS WHICH COULD BE ALSO STIMULATED FROM A QUITE GOOD DRAINAGE, MANUALLY MADE OR BY USING PRESSO THERAPY AND/OR THECAR THERAPY. LD BE EVACUATED THANKS TO THE NATURAL PHYSIOLOGICAL PROCESS.

THERMOLIPOLISIS IS AN ABSOLUTELY NEW AND INNOVATIVE TREATMENT.



## CONTROLLED THERMO SHOCK

Into the sports but also into the usual domestic activity at home, it is possible to get a trauma.

In order to be effective just after the trauma, for avoiding any collateral effect and complications, it is suggested to reduce pain and oedema, for blocking blood flow. Cryotherapy is actually the sole and most important application needed.

Into the chronic and acute phases and pathologies, hot and cold therapy, which is delivered into the deepest tissues, are reducing pain and they could be used also over the inflammation, without any collateral effect. Into the pathologies of joints, articulations, tendons and muscles, warm and cold are the main interested approach for getting therapeutic benefits, both into the acute and into the chronic pathologies.

HC CRYO T-SHOCK is provided with several technological solutions for optimising versatility and performances. Gas free, not invasive, HC CRYO T-SHOCK is provided with a special hand-piece that the operator is using for treating a certain part of the patient's body. The operator, thanks to the direct contact with the patient, is getting his feedback and the compliance for adapting application in real-time.



## CRYOTHERMOLIPOLYSIS "FAT REMOVAL"



### Technical features

- Power supply: 110 - 230 V - 50/60 Hz
- Power consumption: 800 VA
- Dimensions: cm 41 x 42 x 18 h
- Weight: 9 Kg
- Class II A, Type BF
- Large coloured display
- Cryotherapy: max -18° C
- Thermotherapy: max 41° C
- Controlled Shock Therapy from -18° C

to 41° C

- Temperature sensor
- Graphic feedback of temperature in real-time
- Visualisation of the peaks during the application
- Visual indication of emission mode
- Library with pre-set protocols
- Memories for customised protocols
- Touch screen display



## HC SWT: The innovative shock-waves

HC SWT IS THE MOST RECENT AND ADVANCED INSTRUMENT CAPABLE TO DELIVER BOTH LARGE FOCUSED SHOCK-WAVES AND CONTROLLED UNFOCUSED SHOCK-WAVES. THIS INNOVATION IS PROTECTED FROM A PATENTED PROCEDURE.

“LARGE-FOCUS” SHOCK-WAVES OF HC SWT ARE DELIVERED TO A QUITE WIDE AREA, AVOIDING VERY SMALL FOCUS FOR WHICH IT SHOULD BE NECESSARY A POINTING SYSTEM, SUCH AS SONOGRAPHY OR RX. PATENTED “LARGE-FOCUS” EMISSION MODE GRANTS MORE HOMOGENEOUS TRANSFER THAN RADIAL SHOCK-WAVES TO THE DIFFERENT TISSUES, IT IS ALSO DEEPER AND IT IS PERFORMING TREATMENT WITH THE RESPECT OF THE PATIENT’S COMFORT.

CONTROLLED UNFOCUSED SHOCK-WAVES ARE AN INNOVATIVE APPROACH, AND IT IS DIFFERENT FROM RADIAL SHOCK-WAVES SINCE IT IS MORE COMFORTABLE FOR THE PATIENT, WITHOUT SO MANY COLLATERAL EFFECTS AND ALSO DEEPER. HC SWT IS ALSO USEFUL FOR GETTING IN TOUCH WITH THE DIFFERENT DEEPEST CELLULAR LAYERS, WHERE SPHERICAL SHOCK-WAVES ARE CAPABLE TO PROVOKE DIRECT AND INDIRECT EFFECTS. ALL THOSE MECHANISMS, DIRECT AND INDIRECT EFFECTS, OF SHOCK-WAVES ARE USEFUL FOR PROVOKING VERY EFFECTIVE THERAPEUTIC BENEFITS WHICH MAKE LOWER MUSCULAR TENSION, FASTER FUNCTIONAL RECOVERY, PAIN RELIEF AND IMPROVEMENT OF PHYSIOLOGICAL LOCAL CONDITIONS, WHICH ARE CLINICALLY ATTESTED.

**Patented shock-waves applicators**

“LARGE-FOCUS” shock-waves applicator developed from Elettronica PAGANI is capable to generate and transfer mid and high energy density shock-waves into the different cellular layers, by respecting the patient’s comfort. This special feature allows the operator to perform every treatment without any special collateral effects and without provoking pain to the patient.

The special “LARGE FOCUS” probe is using a wide range of energy levels for transmitting the proper energy to the different cellular layers.



**Technical features**

- Wheeled frame device: cm 40 x 30 x 90 h
- Graphic and coloured LCD
- Wide range of pre-set protocols with maps
- Free memories
- Max. 5 Bar electropneumatic device
- Emission mode: “Large Focus”
- Max. penetration of focus: around 55 mm
- Max. penetration of shock-wave: around 70 mm
- Frequency: 1 to 15 Hz (22 Hz on inquiry)
- Touch-screen



**PATENTED DEVICE**

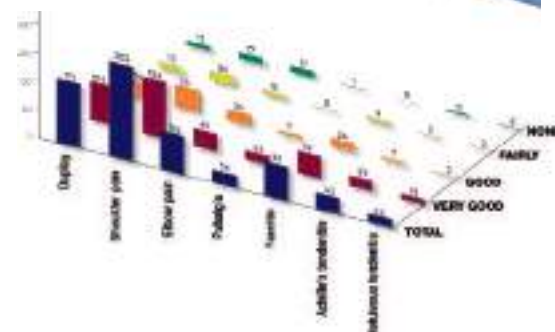


The recent introduction of extra-corporeal shock-waves therapy changed the general approach to several pathologies of musculo-skeletal system.

E-SWT is particularly effective into the treatment of tendons, muscles where a poor vascularization of the joint is present; it is also successfully applied over the treatment of calcifications. Very good effects have been demonstrated into the improvement of elasticity of the superficial tissues, where it seems to improve aesthetic and collagen stimulation and it is capable to reduce edema and cellulite.



**EFFECTIVENESS CLINICALLY TESTED**



From the graphic, we notice very good results in almost all 719 treated patients belonging to the multicenter clinical study

## HC I-RED: 1.6W infrared laser device

HC I-RED IS A VERY EFFECTIVE LASER DEVICE, CAPABLE TO DELIVER HIGH ENERGY DENSITY. IN FACT, THANKS TO THE MOST INNOVATIVE SOLID STATE LASER SOURCES OF 808 NM, HC I-RED IS CAPABLE TO BE EFFECTIVE FOR TREATING ALL THE ACUTE AND CHRONIC PATHOLOGIES WITHOUT ANY SPECIAL COLLATERAL EFFECTS AND CONTRAINDICATIONS, WITH CARE AND SAFETY.

THE NEW TECHNOLOGIC SOLUTIONS OF HC I-RED MAKE 808 NM INFRA-RED LASER BEAM USEFUL FOR A LARGE SPECTRUM OF PATHOLOGIES OF MUSCLES, TENDONS, BONE AND SKIN.

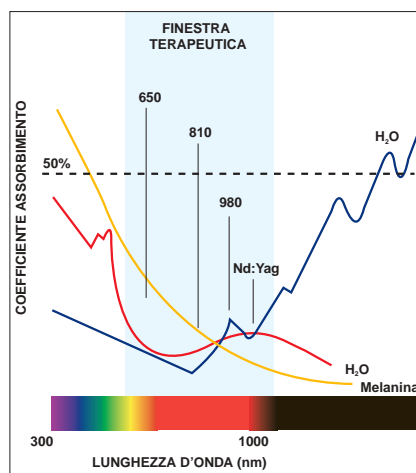
IT IS POSSIBLE TO PERFORM TREATMENTS MANUALLY FOR TREATING TRIGGER AND/OR TENDER POINTS AND ALSO BY MAKING VERY SMALL MOVEMENTS ALL OVER THE INTERESTED AREA.

HC I-RED MAY DELIVER HIGH ENERGY DENSITY TO THE DEEPEST TISSUES THANKS TO THE SPECIAL FEATURES OF THE SOURCE ITSELF AND ALSO TO THE ELECTRONIC SYSTEM WHICH IS GRANTING TO KEEP POWER CONSTANTLY ALL OVER THE FULL APPLICATION TIME.



### Continuous and pulsed modes

HC I-RED is one of the most traditional high energy laser device, provided with a new solid state laser source working with a peak of 1.600 mW, both in continuous and in pulsed emission modes, for provoking both thermal and non-thermal actions over the different cellular layers, depending on the status of the pathology and on the aim of each treatment.



### Technical features

- Laser source type: IR 808 nm
- Modulation: from 1 to 300 Hz
- Peak power: 1.600 mw (1,6 W)
- Effective power: up to 1.200 mw (1,2 W)
- Duty cycle 10% - 100%
- Automatic calculation of energy density and application time
- Pre-set protocols with pictures
- Free memories for storing customized protocols
- 480x800 pixel coloured touch-screen

On inquiry:

- Wheeled frame device with boxes

### Trigger points and manual scanning

From the clinical experience along with the technical knowledge, HC I-RED was provided with a wide range of useful functions for treating trigger (or tender) points automatically and also painful and inflamed areas by a small manual movements over the areas to be treated. Each modality is suggested from the software of HC IR and could be used separately or combined into the same applications.

### All the energy you need!

The operator may select a wide range of functions: starting from the opportunity to set frequency from 10 to 20.000 Hz, depending on the emission modality he would prefer. Also, from the energy point of view, HC I-RED, thanks to the high power laser source is capable to generate high energy density up to 1450 J/cm<sup>2</sup> while 30 minutes application time has been set. the software of HC I-RED and could be used separately or combined into the same applications.





## High Energy Advanced Laser Therapy (H.E.A.L.T.H.) STOP PAIN AND INFLAMMATION!

HEALTH REPRESENTS ONE OF THE NEW HIGH ENERGY ADVANCED LASER THERAPY DEVICES AND IT IS PROVIDED WITH THE MOST INNOVATIVE APPROACH FOR LASER THERAPY INTO THE FIELD OF PHYSIOTHERAPY.

HEALTH ALLOWS TO MAKE TRANSFER TO THE DEEPEST TISSUES AND PROVOKES WARM EFFECTS ALSO OVER THE SUPERFICIAL LAYERS AND GRANTS BIO-STIMULATION FOR PERFORMING NON-THERMAL AND ALSO THERMAL APPLICATIONS WHILE NEEDED FROM THE PATHOLOGY.

LASER BEAM COMING FROM HEALTH IS CAPABLE TO PROVOKE SIMULTANEOUSLY PHOTO-PHYSIC, PHOTO-CHEMICAL, PHOTO-THERMAL AND PHOTO-MECHANIC EFFECTS.

LASER LIGHT IS COMING FROM THE INNOVATIVE SOLID STATE LASER SOURCES WHICH GRANT BETTER ENDURANCE AND PERFORMANCES THAN THE CRYSTAL AND DUST USED INTO THE MOST TRADITIONAL Nd:YAG SOURCES.

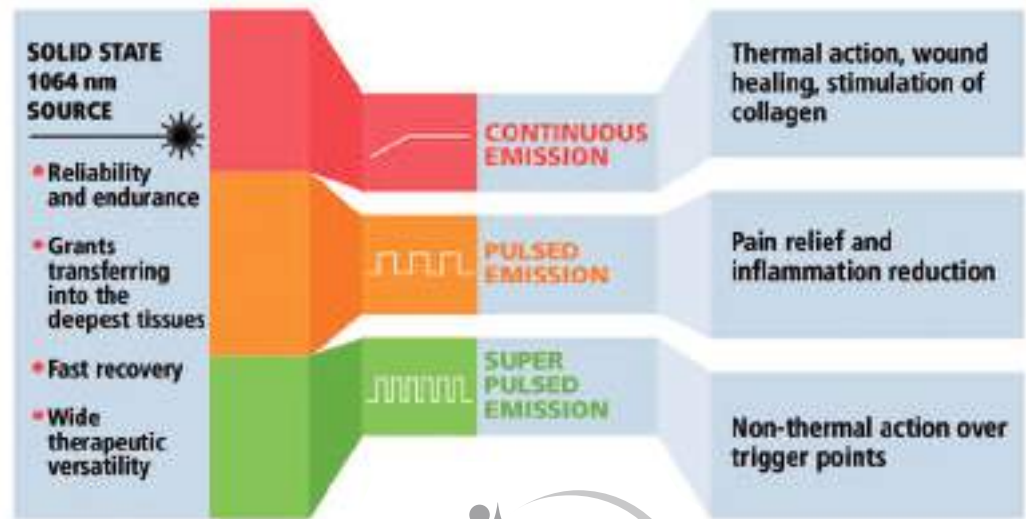
HEALTH IS WIDELY USED PARTICULARLY INTO THE TREATMENTS OF ACUTE DISEASES AND SPORTS MEDICINE, BUT IS ALSO EFFECTIVE IN TREATING SEVERAL CHRONIC DISEASES SUCH AS BACK PAIN AND ARTHROSIS.

CONTINUOUS, PULSED AND SUPER PULSED EMISSION MODES COULD BE DELIVERED FROM HEALTH FOR OFFERING NEW AND INTERESTED THERAPEUTIC POSSIBILITIES, WHICH WERE NOT POSSIBLE BEFORE.





1064 nm laser source is capable of getting in touch with the deepest cellular layers, provoking bio stimulation and pain relief



**MANUAL APPLICATIONS AND LARGE STATIC EMISSION**

Large emission could be done by using a special arm and a conical radiator capable to deliver laser over a quite large area of the patient's body. Furthermore, the operator could make each application manually for getting the best from each treatment, since he may get the feedback from the patient in real-time, during the application it-self. The operator may also do very small



movements, or he may also treat the trigger and/or the tender points locally.



Availability of pre-set programs for continuous, pulsed, superpulsed modes plus trigger points



**Technical features**

mod. HC Yag 6: 1064 nm, 6 W on the source  
 mod HC Yag 12: 1064 nm, 12 W on the source

- Visible beam at 650 nm
  - Modulation: from 1 to 250 Hz
  - Emission modes: continuous/pulsed/super pulsed
  - Operation way: manual and static (on inquiry)
  - Automatic calculation of energy and application time
  - Pre-set protocols with body pictures
  - Free memories
- On inquiry:
- Wheeled frame mod. Roland HC
  - Arm with radiator 12 cm large
  - Touch-screen (included)



## **HPL: tradition and success!**

HPL IS PROBABLY THE MOSTLY DIFFUSED SCANNING LASER DEVICE ALL OVER THE WORLD AND TODAY, FURTHER TO THE EXPERIENCE AND THE SUCCESS OF THE PREVIOUS RANGE, HPL HAS BEEN RENEWED INTRODUCING NEW AND MORE ATTRACTIVE SOLUTIONS, IN TERMS OF PURE DESIGN, PERFORMANCES, EASY TO USE AND EFFECTIVENESS. HPL IT SHALL CONTINUE TO BE A POINT OF REFERENCE INTO THE FIELD OF SCANNING LASER. A CHOICE COMING FROM A STRONG TRADITIONS, RELIABILITY 'OF TRADE-MARK AND PRODUCT. HPL ACTIVATES THE NATURAL HEALING PROCESS IN SEVERAL PATHOLOGIES OF PAIN AND INFLAMMATION.





Each HPL model is provided with High Power Laser source which generates high density energy:

- **HPL 1.6:** with IR source 808 nm, 1,600 mW + 650 nm visible beam
- **HPL 7.0:** with IR source 808 nm 7,000 mW + 650 nm visible beam
- **HPL 7.0** 1064 nm, 7.000 mW + 650 nm visible beam.

The possibility of rotating scanning plane is completely automatic. This feature allows to move easily laser beam, to adapt it to the real treated area and to perform treatment also while the patient has been seated. HPL is completely new:

The sophisticated design is pure expression of all the attention place into this new version, into all aspects of the unit.

From the technology to the performances, from the design to the practical use, from the software to the safety for patients and operators.

The whole result is a new laser device, made for continuing to be appreciated and useful for performing all typical applications of laser.



*Rotation of scanning plane*



*External hand-piece 808 nm, 1200 mW laser source*



*Independent use of scanning side and external hand-piece*



*Scanning operation*



*Pre-set programs with body pictures  
Customised memories*

### Technical features

- Laser protection: class IV
- Power supply: 110 – 230 Vac +/- 10% 50/60 Hz
- Dimensions & weight: cm 45x60x160 h - 40 Kg
- Visible beam: 650 nm
- Emission: continuous and pulsed
- Duty-cycle: 10 ÷ 100%
- Frequency: 10 ÷ 200 Hz
- Rotation of laser beam: - 45° / + 90°
- Pre-set programs and free memories
- Independent external output: hand-piece with IR 808 nm 1200 mW (on inquiry)
- Standard accessories: protective goggles(1), inter-look connection, manual



## LYMPHACTIVE: drainage over the top!

LYMPHACTIVE IS THE ONLY AND EXCLUSIVE PATENTED DEVICE GRANTING DYNAMIC PRESSO THERAPY. FIRST ALL OVER THE WORLD, LYMPHACTIVE HAS BEEN STUDIED WITH REFERENCE TO THE COMBINATION BETWEEN ENGINEERING KNOWLEDGE AND CLINICAL APPROACH.

### STANDING POSITION

STANDING POSITION DURING PRESSO THERAPY IS THE MOST PROPERLY APPROACH FOR GETTING THE HIGHEST THERAPEUTIC RESULTS; IT IS COMFORTABLE FOR EVERY PATIENT AND ALSO SAFETY.

### RESPECT OF PHYSIOLOGIC FLOW

STANDING POSITION IS FAVOURING THE MOST NATURAL AND PHYSIOLOGICAL LYMPHATIC AND VESSEL FLOW.

### ACTIVE TRAINING

DYNAMIC PRESSO THERAPY IS THE ONLY DEVICE ASSURING ACTIVE THERAPEUTIC APPROACH. COMPLIANCE OF THE PATIENT DURING PRESSO THERAPY IS ONE OF THE MAIN DETAIL FOR GETTING THE BEST FROM THE APPLICATION ITSELF. ALL BODY STRUCTURE IS WORKING SIMULTANEOUSLY WHILE PRESSO THERAPY IS ON OPERATION. So, MUSCLES, BUT ALSO ALL THE REST OF THE BODY ASSURE THE PROPER ACTIVITY. ON THIS CONTEXT, DYNAMIC PRESSO THERAPY IS THE ONLY THERAPEUTIC APPROACH CAPABLE TO MAKE ALL LYMPHATIC AND VESSEL SYSTEMS WORKING ALL TOGETHER WITH THE REST OF THE HUMAN BODY. LAST BUT NOT LEAST, PUMP COMING FROM THE PRESSURE OF THE FOOT OVER THE GROUND DURING WALKING/RUNNING IS GRANTING THE MOST PROPER AND CORRECT BLOOD FLOW.



■ Pressotherapy represents a therapeutic massage useful for reducing oedema, stimulating blood flow thanks to the pressure, improving aesthetic of the treated parts of the body. Pressotherapy is addressed to remove exciting interstitial liquids and favoring venous and lymphatic flow, by respecting physiological circle to the different interested anatomic parts. Drainage effect is coming only while pressure has been properly adjusted for making sequential pressure and pressure phases are alternated to rest phases (intermittent pressures).



- 1- Increasing of venous and lymphatic flow velocity: applied pressure makes lower dimensions of venous and lymphatic vessels where pressure is applied. Effect is the increasing of blood flow velocity into the venous and lymphatic systems.
- 2- Biochemical effects: hardening and elastic force coming from the physiologic reply, grant anti-trombotic, fibrous and vasodilatation process.
- 3- Effects over edema: pressure, which is applied over the skin, is transmitted to the sub-cutaneous layers. This action makes greater capillary absorption capability, reduction of lymphatic interstitial load, volume increasing.



Jacket for dynamic pressotherapy

### ■ Flebology

Stimulate venous return, favoring problem of blood static massroblema delle mas.

### ■ Linfology

It finds application into lymphatic stasis and into the linfoedema, into the reactive fibrotic skin.

### ■ Beauty Medicine

Largely used into the beauty, presso therapy is suful for improving skin and favoring blood flow and making drainage.

### ■ General surgy

It is seful to use presso therapy after surgery for improving drainage and making stimulation after mastectomia; is is also used for reduinc hematoma and post-surgical oedema.

### ■ Physiotherapy

Into the pathologies of joints, into muscular lassity, contractures, presso therapy is getting very good results.

### Technical features

- Power supply: 110 - 230 V – 50/60 Hz
- Power consumption: 80 VA
- Protection Class: I type BF
- 8 sequential outputs
- Visualization: large coloured display
- Touch-screen LCD
- Software: on Windows CE
- Wide range of pre-set programs
- Free memories for costumised protocols
- Emission modes: continuous, modulated, cycling
- Max. pressure 200 mm/Hg

On inquiry:

- jacket for dynamic presso therapy
- single arm
- double arm
- lower limbs with holder
- trolley



Single arm



Lower limbs with holder



## HC ALFATRAC

ALFATRAC IS PROBABLY THE MOST ADVANCED AND VERSATILE DEVICE FOR PERFORMING THERAPEUTIC TRACTIONS. THE ADVANCED SOFTWARE WORKING ON WINDOWS CE PLATFORM, IS ALLOWING A VERY CLEAR AND FULL VISUALIZATION OF ALL THE AVAILABLE FUNCTIONS. THE LARGE COLOURED TOUCH-SCREEN ALONG WITH THE USEFUL KEYS OFFER TO THE OPERATOR A VERY FULL CONFIGURATION. ALFATRAC IS CAPABLE TO PERFORM CONTINUOUS, STATIC, INTERMITTENT, PROGRESSIVE AND CYCLING THERAPEUTIC TRACTIONS WHERE THE OPERATOR MAY SET FORCE, WORKING TIME, REST TIME, PROGRESSION, CYCLES AND STEPS FOR ADAPTING EACH TREATMENT TO THE PERSONAL PATHOLOGY AND FEEDBACK.

A WIDE RANGE OF PRE-SET PROTOCOLS SUGGESTING PARAMETERS, TRACTION MODALITY, STEPS ARE AVAILABLE FOR A LARGE RANGE OF PATHOLOGIES. LAST BUT NOT LEAST, THE EXPERT OPERATOR MAY SET AND STORE INTO THE MEMORY A WIDE RANGE OF CUSTOMIZED PROTOCOLS, FOR ADAPTING EACH TREATMENT TO THE PROPER FEELING OF THE PATIENT.





**Continuous and progressive tractions**  
Continuous and progressive therapeutic tractions are successfully performed for decompressive treatment and they are more indicated for treating articular blocks.

**Intermittent and cycling tractions**  
Intermittent and cycling therapeutic tractions are performed step by step with working traction and rest phases, granting to the muscle proper activity of contraction and rest, for favoring regular nutrition to the complex muscular and tendon joints.

### Cervical traction

Usually, column is the part of the body which is mainly treated from therapeutic tractions. Cervical is often treated several pathologies, such as cervicgia, brachial syndrome, etc. Traction modality is established with reference to the weight of the patient, but also with reference to the age, sex, patient feeling and particularly the objective of the treatment.

### Lumbar and total-body tractions

Lumbar traction is particularly made over the lower part of the column. On this way, applied force is surely higher than cervical tractions.

### Technical features

- Power supply: 110 - 230 V – 50/60 Hz
- Power consumption: 80 VA
- Safety Class: 1 type B
- Dimensionis and weighth: cm 41x42x18 h
- Visualization by: coloured touch-screen
- Library with pre-set programs
- Free memories for customised protocols
- Traction modalities:
  - continuous
  - progressive
  - intermittent
  - cycling
- Force adjustment from 1 to 25 Kg for cervical;  
from 1 to 90 Kg for lumbar
- Application time: adjustable from 1 to 60 min
- Remote control for patient



Static couch for cervical and lumbar traction



Height adjustable couch for cervical and lumbar tractions



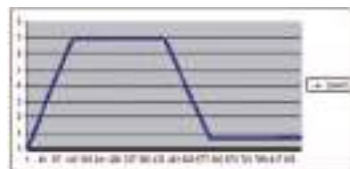
Set of belts for pelvic (M/L) and thoracic (M/L), foot.



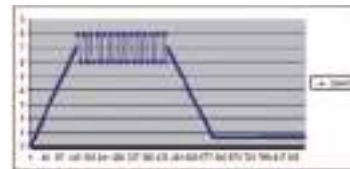
Arm for cervical tractions



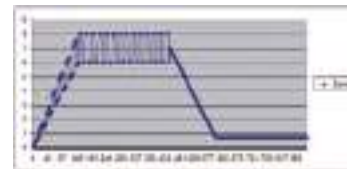
Real-time visualization of traction



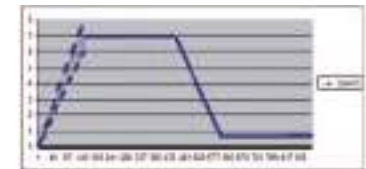
Static and dynamic continuous traction is performed, with or without rest.



Intermittente traction. Adjusting rest and working time.



Progressive and intermittent tractions with cycles.



Progressive traction with dynamic cycles.

## HC SOUND Multi-frequency Ultrasound

ULTRASOUND TRANSMISSION MAKES A MICROMASSAGE OF VERY HARD INTENSITY WHICH IS INTERESTING THE DEEPEST CELLULAR LAYERS.

THE PROPAGATION OF ULTRASOUNDS IN BIOLOGICAL TISSUES, UNDER THE SHAPE OF MECHANICAL QUICKLY ALTERNATING PRESSURE, REPRESENTS A TREATMENT OF HIGH THERAPEUTIC VALUE. DURING THE PASSAGE OF THESE VERY QUICK OSCILLATIONS, THE TISSUE VIBRATES IN SINTONY WITH THEIR FREQUENCY AND RECEIVES THE EFFECTS UNDER THE SHAPE OF PRESSURE, HEAT, PHYSICAL-CHEMICAL MODIFICATIONS AND DEEP VIBRATIONS IN THE CELLULAR PROTOPLASM.

THE CONSEQUENCE IS SO A CONSIDERABLE INCREASING OF THE INTRACELLULAR EXCHANGES AD A PRODUCTION OF DIATHERMY, ELECTRICAL AND CHEMICAL EFFECTS FROM WHICH DERIVE THE MODIFICATIONS IN THE SWELLING CONDITION OF CELLS, A STIMULATION ON THE NERVOUS ENDINGS AND A MAKING OF CHEMICAL SUBSTANCES HAVING A TONIC AND AN ANTI-TOSSIC EFFECT.

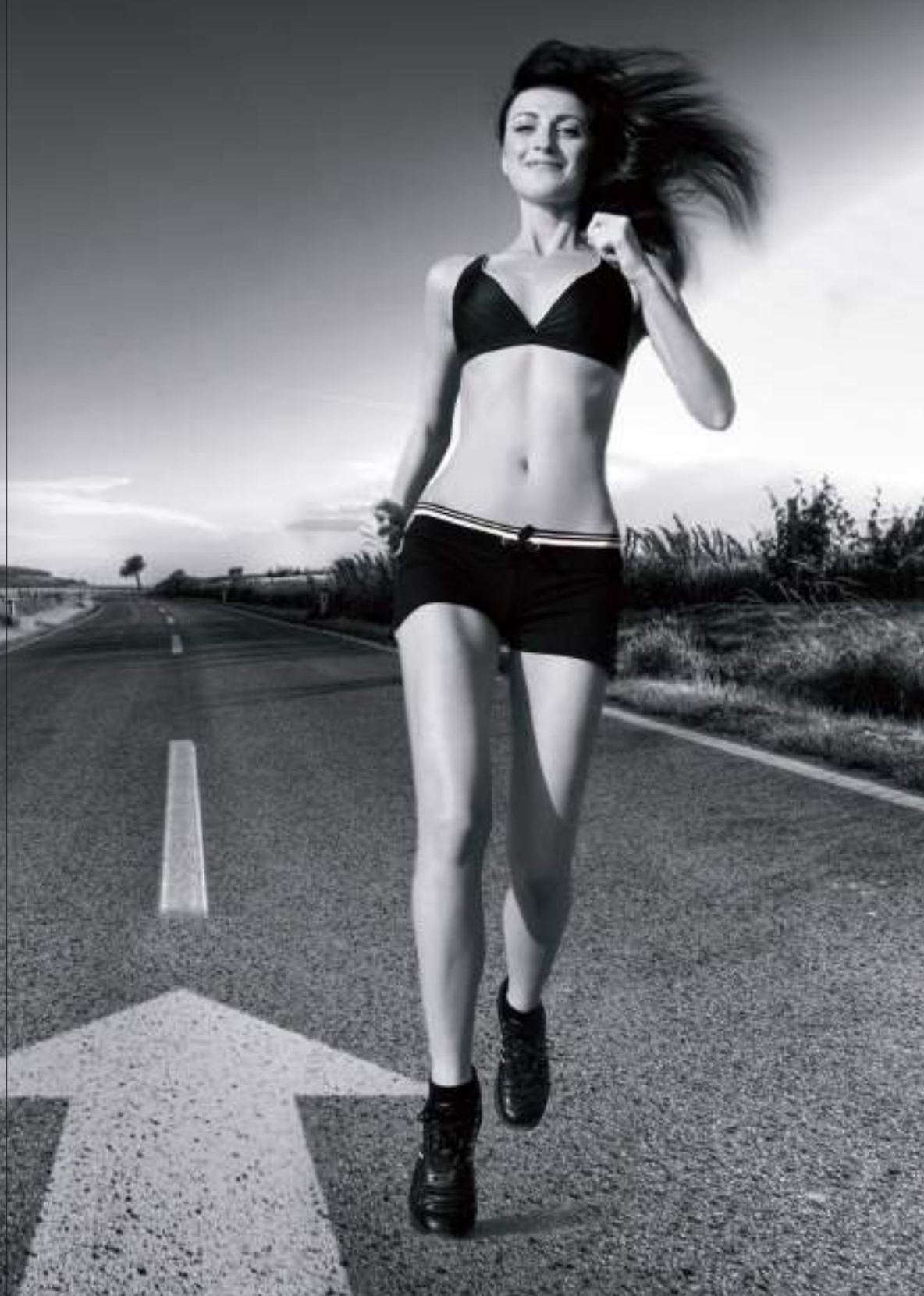
THE MAIN EFFECTS OF THE ULTRASOUNDS ARE ANALGESIC, SPASMOLYTIC, ANTI-INFLAMMATORY AND BACTERICIDAL. THE THERAPEUTIC INDICATIONS ARE MAINLY BASED ON THESE EFFECTS.

**MECHANICAL EFFECT**

**THERMAL EFFECT**

**CHEMICAL EFFECT**

**CAVITATION EFFECT**



HC SOUND is a superior ultrasound therapy device, made by Elettronica PAGANI for granting to the most professional operators a special versatile device, for performing each application with the best benefits and without any compromise. Every function has been made in order to get the best, providing the unit with the best features, both in terms of technological solutions and in terms of medical applications.

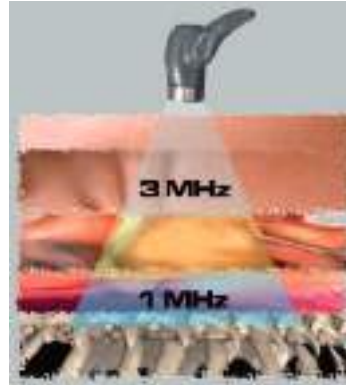
Cavitation is also available: it is coming from a generation of gas bubbles, dissolved in a fluid, subjected to changes of diameter in relation to the pressure changes generated by ultrasonic treatment. Cavitation is suitable by modulating frequency up to 200 Hz, making hard mechanical effects.



Ergonomic multifrequency 1-3 MHz ultrasound head for massage and under water applications.



8 cm large ultrasound head for static applications with elastic strap.



Single and combined frequency selection is available for adjusting penetration with reference to the origin of each pathology.

1 MHz frequency is the deepest frequency, while 3 MHz is used for vascular and superficial applications. 1 and 3 MHz combination is the best for treating all the cellular layers.



### Technical features

- Frequency: 1-3 MHz
- Emission: continuous and pulsed (from 20 to 80%)
- Modulation: from 1 to 200 Hz
- Multifrequency head, 5 cm<sup>2</sup>, single frequency or combined
- Timer max. 30 min
- Graphic and coloured touch-screen
- Free memories
- Pre-set programs with pictures
- Intensity max: 3 W cm<sup>2</sup>
- Real-time device for attesting coupling of head and patient's skin

### On inquiry:

- 1 MHz ultrasound head 1 cm<sup>2</sup> 1-3 MHz
- Static head 8 cm large with elastic strap
- Wheeled frame device with boxes
- Arm mod. Profilo with head holder for static applications





## **HC UNISTIM** **Universal electrotherapy**

HC UNISTIM IS THE UNIVERSAL ELECTROTHERAPY DEVICE, CAPABLE TO COVER ALL THE INQUIRIES INTO THE PHYSIOTHERAPY FIELD. FROM THE PAIN RELIEF TO THE DRAINAGE; FROM THE SELECTIVE STIMULATION OF NERVOUS FIBERS TO THE STIMULATION OF MUSCLES; FROM IONTOPHORESIS TO THE HIGH VOLTAGE CURRENT.

### LOCAL TRANSMISSION OF MEDICAL SUBSTANCES

HC UNISTIM IS PROVIDED WITH BOTH CONTINUOUS AND INTERRUPTED GALVANIC CURRENT. BOTH THE CURRENTS ARE MAINLY USEFUL FOR DELIVERING MEDICAL SUBSTANCES FOR ANTI-INFLAMMATORY AND PAIN RELIEF. CONTINUOUS GALVANIC CURRENT IS SURELY ABLE TO DELIVER MORE, OTHERWISE INTERRUPTED GALVANIC CURRENT IS MORE SUITABLE FOR AVOIDING UNCOMFORTABLE FEELING.

### PAIN RELIEF

HC UNISTIM OFFERS A WIDE RANGE OF WAVEFORMS: FROM THE TRADITIONAL TENS TO THE BI-PHASIC CURRENT, FROM ALL THE DIADYNAMIC CURRENTS AT 50 AND 100 Hz, SINGLE OR COMBINED TO THE MID FREQUENCY CURRENTS, VERTICALLY AND HORIZONTALLY ADJUSTABLE, TO THE HIGH VOLTAGE CURRENTS (ON INQUIRY).

### ANTI-INFLAMMATORY AND EDEMA

INTO THE FIELD OF ANTI-INFLAMMATORY AND ANTI-EDEMA APPLICATIONS, UNISTIM IS PROVIDED WITH A LARGE RANGE OF CURRENTS, SUCH AS MID FREQUENCY CURRENTS AND DIADYNAMICS.

PARTICULARLY, MID FREQUENCY CURRENTS ARE CAPABLE TO PERFORM TREATMENT OVER INFLAMMATION AND EDEMA PROCESSES WITH A VERY GOOD COMFORT FOR THE PATIENT. THIS IS THE SPECIAL FEATURE OF ALL BI-DIRECTIONAL CURRENTS WHICH ARE CAPABLE TO AVOID BURN AND JOULE EFFECTS, BY DOING STIMULATION OVER MUSCLE AND NERVOUS FIBERS.





### Mid horizontal frequency currents

Horizontal IF currents are special IF currents for which the operator, further to the intensity, may adjust frequency by keeping intensity stable or by also setting intensity. Usually IF Horizontal currents are suitable for treating pain and inflammation. Usually, it is a very comfortable current that the patient feels very well all over the body.

### Electrical stimulation

Contraction of muscles could be performed by stimulating the muscle itself or the nervous fibers. While denervated muscles are present, it is necessary to stimulate muscles for avoiding degeneration and atrophy of the muscles. The most useful waveforms are the rectangular, triangular and exponential pulses which can be adjusted up to 1000 msec, with reference to the denervation.

### Stimulation of normal muscles

Contraction, without any denervated muscles is performed after non-used muscles, due to surgical intervention, amiotrophy, but also for improving force, endurance and the general performances of muscles. At this end, usually, it is suggested to use Biphasic, Kotz, faradic currents; it depends on the type of muscles, on the status of the muscles and also on the sensitivity of each patient. The most suitable current is the waveform capable to provoke the best stimulation, by respecting the patient's comfort.

### Veno-lymphatic current (drainage)

Veno-lymphatic current is a special exponential waveform, capable to improve blood circulation, accelerates venous flow, reduces pain coming from inflammation and edema.



### Continuous and Pulsed Vacuum therapy (on inquiry)

Vacuum therapy could be used alone for treating special pathologies such as cheloidis, ulcers, edema, lymphatic problems; also it could be combined to the electrotherapy, in particular to the IF currents, for fixing electrodes and stimulating drainage and anti-inflammatory effects.

### Technical features

- Two outputs
- Waveforms: galvanic and interrupted galvanic, diadynamics (50-100 Hz, CP, LP, 50 & 100 Hz interrupted), rectangular, triangular, exponential, biphasic, Trabert, faradics (neodyn, rectangular, triangular), IF Bipolar and quadripolar, isoplanar, vectorial, mf of stimulation, Kotz, If horizontal current, Drainage current
- Intensity: max. 76,5 mA (150 mAp)
- Display: coloured graphic with touch-screen
- Pre-set protocols with pictures
- Free memories for customized protocols

### On inquiry:

- Continuous and pulsed vacuum
- High voltage current
- Trolley with 4 boxes





## **HC SOUNDSTIM** **Combined universal** **electrotherapy and** **1 – 3 MHz ultrasound**

HC SOUNDSTIM IS THE MOST VERSATILE COMBINED DEVICE FOR ELECTROTHERAPY AND ULTRASOUND. 1 & 3 MHz MULTIFREQUENCY ULTRASOUND THERAPY IS COMBINED TO THE UNIVERSAL ELECTROTHERAPY DEVICE, CAPABLE TO PERFORM EVERY USEFUL CURRENT ALONE OR ALSO COMBINED TO THE ULTRASOUND WAVES.

THE UNIVERSAL ELECTROTHERAPY GENERATOR IS PROVIDED WITH TWO OUTPUTS. HC SOUNDSTIM ALLOWS THE OPERATOR TO SET EVERY PATHOLOGY WITH ALL THE WIDEST RANGE OF PARAMETERS, OVER THE WINDOWS CE PLATFORM; ALSO, THE OPERATOR MAY USE A LOT OF PRE-SET PROTOCOLS WITH THE RELEVANT PICTURES, FOR PLACING CORRECTLY THE RELEVANT ELECTRODES AND/OR ULTRASOUND HEAD.

COMBINATION OF THE TWO AVAILABLE GENERATORS, ULTRASOUND AND ELECTROTHERAPY, ALSO GRANTS MORE THERAPEUTIC BENEFITS, DUE TO THE SUM OF THE COMBINED EFFECTS INTO THE SAME TIME.





HC SOUNDSTIM allows to select both single generator (ultrasound or electrotherapy) and also to combine the two generators for mixing ultrasound to electrotherapy. Mainly, the combination is made for performing pain relief and anti-inflammatory applications and it is generally more effective than the single technique both for reducing application time and granting better results.



Ergonomic 1 - 3 MHz head for massage and under-water applications.

Compact dimensions along with the wide versatility of the combined device, make HC SOUNDSTIM a very special device, which is granting two electrotherapy output channels, full set of mid and low frequency currents, 1-3 MHz ultrasound device, for single and combined frequencies.

## Technical features

### Ultrasound

- Frequency: 1-3 MHz
- Emission: continuous and pulsed (from 20 to 80%)
- Modulation: 1 to 200 Hz
- 5cm<sup>2</sup> multifrequency head for single and combined use
- Timer max. 30 min
- Intensity max: 3 W cm<sup>2</sup>
- Real-time attesting no-coupling between patient's tissue and us head

### Elettrotherapy

- Outputs: n. 2
- Intensity max.: 76,5 mA

### Low frequency:

- Galvanic, interrupted galvanic, diadynamics (50-100 Hz, CP, LP, 50 and 100 Hz interrupted), rectangular, exponential, triangular, Biphasic, Tra-

bert, Faradics, drainage current

### Mid frequency:

- Outputs: 2
- Frequency: 2,5 KHz to 20 KHz
- IF bipolar, IF quadripolar, IF isoplanar, IF vectorial, MF of stimulation, Kotz, IF horizontal
- Graphic and coloured LCD with touch-screen
- Pre-set programs with pictures
- Free memories

### On inquiry:

- HV current
- Trolley with 4 boxes
- 1 cm<sup>2</sup> 1-3 MHz head
- 1 MHz 8 cm large head with strap for static and underwater treatments
- connector combining electrotherapy to ultrasound applications



## HC BIOSTIM Pulsed Magnetic Fields

HC BIOSTIM IS THE ADVANCED INSTRUMENT FOR DELIVERING LOW FREQUENCY MAGNETIC FIELDS INTO THE HUMAN BODY. IT IS PROVIDED WITH TWO OUTPUTS AND IT MAY DELIVER A LOW FREQUENCY MAGNETIC FIELD ADJUSTABLE IN FREQUENCY FROM 1 TO 200 HZ, BOTH IN CONTINUOUS AND IN MODULATED MODES. WHILE THE HC BIOSTIM DESK-TOP DEVICE IS USED ALONE, A MAX. PEAK POWER OF 100 GAUSS IS AVAILABLE OVER EACH APPLICATOR; OTHERWISE, WHILE HC BIOSTIM IS CONNECTED TO THE SPECIAL ERGONOMIC COUCH, IT IS POSSIBLE TO SET A PEAK POWER UP TO 100 GAUSS FOR EACH SOLENOID.

A SO HIGH PEAK POWER IS CAPABLE TO PROVOKE A VERY HARD MECHANICAL EFFECT, WHICH IS THE MAIN FEATURE CAPABLE TO STIMULATE BONE INTO THE TREATMENT OF FRACTURES, PSEUDOARTHROSIS, ARTHROSIS AND GENERALLY ALL PATHOLOGIES OF BONE.

TWO DIFFERENT COUCHES ARE AVAILABLE, WITH ONLY ONE SOLENOID DIAMETER 80 CM OR WITH TWO SOLENOIDS FOR PARTIAL AND TOTAL-BODY TREATMENTS WITH 80 CM SOLENOID, PLUS 60 CM SOLENOID.

HC BIOSTIM IS SUITABLE FOR TREATING ALL THE PATHOLOGIES WHERE ELECTROMAGNETIC FIELDS GET BENEFITS.

HIGH POWER ALONG WITH A WIDE RANGE OF USEFUL FREQUENCIES ALLOW THE OPERATOR TO ADJUST EACH PARAMETER WITH REFERENCE TO THE REAL CONDITIONS OF THE PATHOLOGY AND WITH REFERENCE TO THE PATIENT'S FEELING.



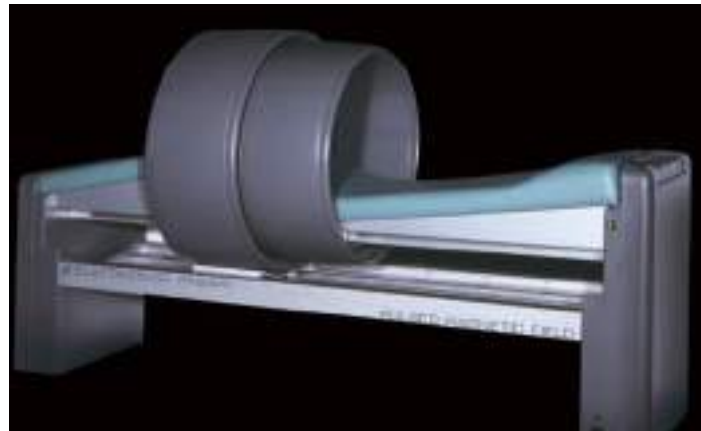


## Technical features

- Outputs: 2
- Frequency: 10 to 200 Hz
- Emission: static and modulated frequency
- Intensity: 100 Gauss (peak); effective over the patient max. 50 Gauss
- Graphic and coloured LCD with touch-screen
- Pre-set protocols with pictures
- Free memories
- Standard accessories: pair of applicators with strap

## On inquiry:

- Ergonomic couch with two solenoids for partial and total-body applications
- Ergonomic couch with single solenoid
- Solenoid 30 cm large for lower and upper limbs
- Wheeled frame with boxes



HC BIOSTIM becomes a very special and sole electromagnetic device while it is combined to one of the available ergonomic couches. The ergonomic couch allows a comfortable placement of the patient, since the biggest solenoid is 80 cm large and also the two available rails permit to move the solenoid for enlarging placement and also for making electromagnetic field smaller or larger depending on the area to be treated. While the two solenoids are on the same place, electromagnetic field becomes stronger.



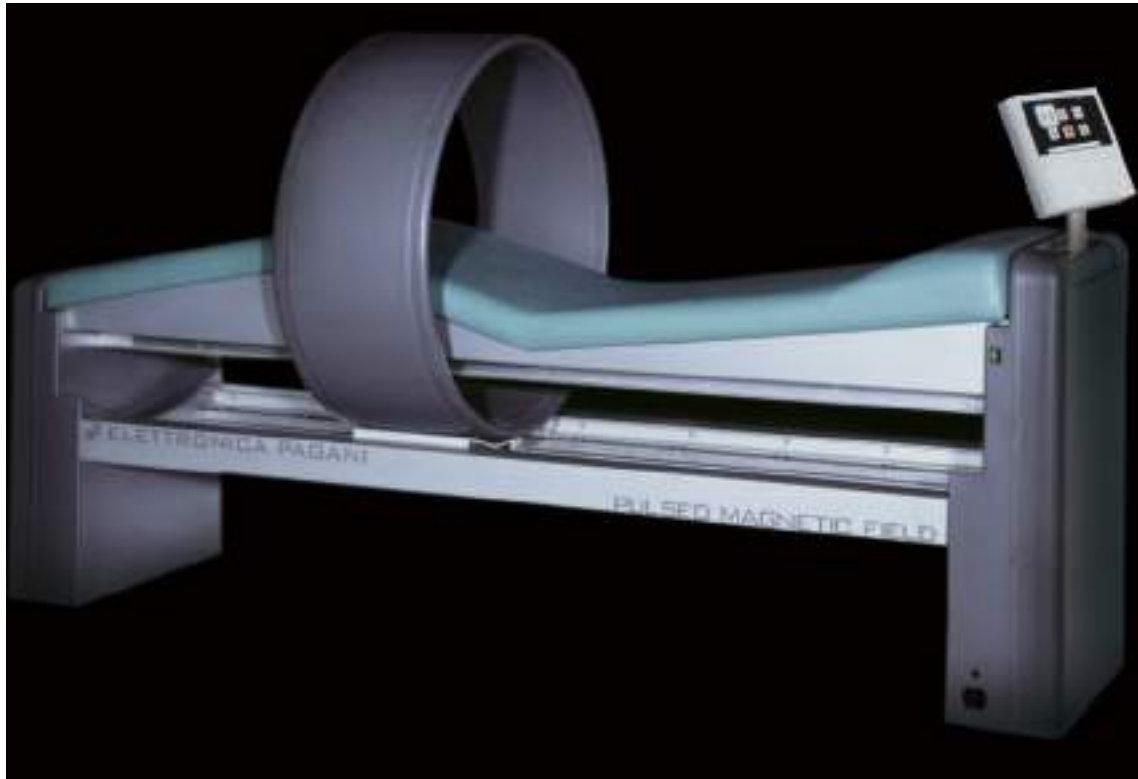
## CMP Plus

FROM THE KEYBOARD THE OPERATOR MAY SET THE AVAILABLE PRE-SET PROTOCOLS, ENTER UP TO 50 CUSTOMISED MEMORIES, USING MANUAL FUNCTION.

THE ACTION MECHANISM OF CMP (THE ITALIAN ABBREVIATION FOR “PULSED MAGNETIC FIELDS”) ON THE BONY TISSUE IS BASED ON A SERIES OF ELEMENTS, AMONG WHICH, ONE OF THE MOST IMPORTANT, IS THE PIEZOELECTRIC EFFECT. THE CMP CAN BE USEFULLY USED IN TREATING REPAIRING PROCESSES. IN FACT, IN THE BONE, THE COLLAGEN ACTS AS A PIEZOGENERATOR AND DUE TO THE VIBRATIONS CREATED BY THE CMP, IT IS POSSIBLE TO INTENSIFY OR REPLACE THOSE NATURAL FUNCTIONS, WHICH WERE DISTURBED OR ABSENT. EXPERIENCES POINT OUT, APART FROM A STIMULATING PROCESS OF COLLAGEN, AN ORGANISING EFFECT OF CMP ON THE STRUCTURE OF THE BONY CALLUS. THIS EFFECT IS MOSTLY CARRIED OUT AT TISSUE LEVEL, IN THE FORM OF GREATER ORIENTATION BOTH OF CELLULAR AND FIBRILLARY COMPONENTS.

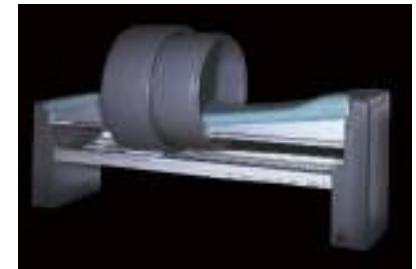
THE REACTION OF MICRO-VASCULAR TISSUES TO CMP IS CONNECTED WITH AN INDUCED STIMULATION OF CMP ON THE INTRA-FIBROBLASTIC SYNTHESIS OF GAG AND ESPECIALLY OF THE LAIURONIC ACID, WHICH GIVES IRON A BIGGER POSITIVENESS AT ISCHEMIC LEVEL. ON THE OTHER SIDE, THE INHIBITION OF EDEMA IS MOST LIKELY DUE TO THE PARTIAL BLOCK OF ENDOTHELIAL PERMEABILITY BY GAG AND BY STIMULATION OF DIFFERENTIATION IN GAG FIBROBLASTS, WHICH ARE PRODUCERS OF PRIMITIVE MESENCHYMAL CELLS.





## Technical features

- Dimensions: cm 215x65x65h
- Frequency: 10 to 200 Hz
- Emission: static and modulated frequency
- Intensity: 100 Gauss (peak); effective over the patient max. 50 Gauss over each solenoid
- Graphic and coloured LCD
- Pre-set protocols
- Free memories
- CMP 1 Plus: single 80 cm large for partial applications
- CMP 2 Plus: main solenoid 80 cm large; second solenoid 65 cm large



CMP Plus is an innovative magnetic field generator with couch. The keyboard is installed over the couch and there is no need to connect the couch to any extra device. Everything is included into the couch and the operator may set all parameters by using the electronic keyboard placed over the top of the couch.

From the keyboard the operator may set the available pre-set protocols, storing up to 50 customised memories, using manual function.

CMP 1 Plus is provided with single 80 cm large solenoid for performing treatment over each articulation and segment; CMP 2 Plus is provided with two different solenoids: the first one 80 cm large and the second one 65 cm large, for adapting applications to the area to be treated, from segment

up to the whole body of the patient.

The two different solenoids make CMP 2 Plus a very special magnetic couch generator: in fact, the solenoids are placed over two different rails for granting the opportunity to move them for placing them just over the interested area to be treated. This helps the operator to perform both partial and total-body treatment by using the same couch; on the other hand, thanks to this opportunity, space for putting the patient over the couch could be larger.

The first solenoid of 80 cm large is so big that almost all people, also obese people could enter into the solenoid. On this context, the ergonomic couch, further to best comfort of each patient, has been tested with a load up to 500 kg.





QUALITY FOR HEALTH SINCE 1947

Via De Nicola 4/D

20037 Paderno Dugnano (MI) - Italy

Tel. +39.02 99043903

Fax +39.02 99045149

[info@elettronicapagani.it](mailto:info@elettronicapagani.it)

[www.paganihhealthcare.it](http://www.paganihhealthcare.it)

