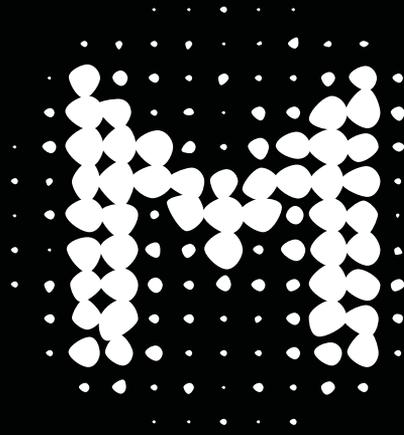


MLS[®]
Multiwave
LockedSystem

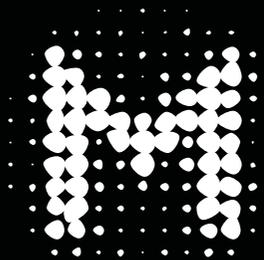


iS

MLS[®]
**HIGH PEAK
PULSE**



ASL
A S A L A S E R
Research and Therapeutic Solutions



MiS

MLS[®]
HIGH PEAK
PULSE



**Boosted
MLS[®]**



**Homogeneity
of treatment**



**Game-changing
Technology**



Safety



**Ergonomics
and practicality**



Optic fibre

MiS combines the experience of MLS[®] Laser Therapy and of Hilterapia[®], blending in a single device the essential knowledge acquired in the past, the know-how of the present, and the tools for the construction of never-before-seen application scenarios for the near future.



MiS ASA

Since its foundation in **1983**, ASA has established itself internationally in the laser therapy scene for its use in the most diverse disciplinary fields: from physiotherapy to rehabilitation, from muscle and joint pain management to sports medicine and veterinary medicine.

A history over three decades long whose beginning coincides with the birth of laser therapy itself. ASA soon becomes a synonym of **specialization** – in the development of therapeutic solutions based on laser sources and magnetic fields – and **research**: an integrated and free research, influential and open to innovation, an essential meeting point between theory and practice, science and production, between ethics and market needs.

The motivation that has guided ASA along the journey that has seen it engaged in countless interdisciplinary researches has been the strong desire to pursue the well-being of the patient and to enhance the professionalism of the therapist: the goals of a tireless work that has placed the individual and its needs at the centre of its operation in view of the recovery of optimal patient conditions, through a journey of care and attention toward every curative need.



MiS History

Since **2003**, with the launch of **MLS®** Laser Therapy (Multiwave Locked System), ASA revolutionises the treatment of painful pathologies: the coordinated and synchronized emission of several laser emissions with different wavelengths – pulsed and continuous – allows in fact to focus the action on the therapeutic result by modulating and controlling the emission.

In 2004 ASA launches **Hilterapia®** for the treatment of deep osteoarticular and musculotendinous pathologies, marking a new essential milestone for the company and inaugurating a long season of international awards.

ASA now presents **MiS**: the result of the work of a dedicated and competent team that has been able to imagine new horizons for laser therapy by concretizing them into a device with never-before-seen performance, capable of combining the **synchronized action of MLS®** Laser Therapy with **Hilterapia®** distinctive **pulsed power**.



MLS®
Multiwave
LockedSystem

2003

Hilterapia®

2004



MiS MLS®

MLS® Laser Therapy (Multiwave Locked System) has built its success on a quality impulse patented as a synchronization of two wavelengths (808nm + 905nm) with different emission modes, continuous and pulsed, to obtain a complex energy mix capable of promoting analgesic, anti-inflammatory, anti-edema, and reparative effects of tissues.

Over the years, **MLS®** Laser Therapy has distinguished itself for its therapeutic efficacy combined with a high level of safety, thanks to a conscious application of energy dosages and clinical experience, as well as to the global therapeutic approach resulting from the scientific research of ASAcampus.

MiS is the result of the deep knowledge of the therapeutic potential of the MLS® pulse, of which it inherits the wavelengths, the characteristic synchronized modulation of continuous and pulsed emissions, the safety of treatment, the proven efficacy, and the scientific evidence of the action mechanisms.

MiS a Game Changer

MiS is the turning point for a new generation of therapeutic devices by ASA that gathers the technological and scientific know-how of the last twenty years. The proven advantages of the synchronized **MLS®** pulse are enhanced by a patent pending fibre optic technology and a new modulation capable of conveying even more intense and penetrating energy packages into the tissues.

The experience gained with **Hiliterapia®** has led to an increase in power of the impulse, focusing on the 905nm pulsed component, which in **MiS** reaches a peak power in the order of kW! The very high, instantaneous peak power and a controlled average power are consistent with the choice of pursuing efficacy while safeguarding patients' safety. The modulation in short pulses allows in fact to "tame" the peak power, taking advantage of its therapeutic benefits in complete safety, avoiding damaging thermal effects.

The scientific studies carried out have shown that the peculiarities of MiS are not limited to technological innovation and the enhancement of the biological effects already achieved with MLS® but, exceeding all expectations, have revealed new therapeutic effects that extend the possible applications of laser therapy towards pathologies with high social impact.



MiS



Boosted MLS®

It inherits the proven efficacy and therapeutic superiority of the synchronized emission of MLS® and enhances its power – in particular the peak power of the pulsed component – for an even stronger and deeper action. This opens the doors to new therapeutic goals, in particular in the context of peripheral neuropathies.



Homogeneity of treatment

The spatial overlap between the different wavelengths ensures the diffusion of the MiS energy mix on the irradiated area. The adopted optical technology allows a uniform beam profile and a homogeneous energy distribution on the target area.



Game-changing Technology

It has gone beyond the technological state of the art by optimizing the fibre coupling of 7 diode laser sources, pulsed and continuous, reaching peak powers of 1kW and an emission quality of very high level.



Safety

The very high instantaneous power, which reaches the order of kW, is modulated through very short pulses that allow the stimulation of the therapeutic biological processes while maintaining control of the thermal effect and therefore the safety of the treatment, which has always been an essential requirement for ASA.



Ergonomics and practicality

Light, compact, and multifunctional handpiece. The mechanical connection system of the optical terminals has been designed to allow immediate interchangeability and is equipped with a recognition sensor to adjust the emission parameters automatically.



Optic fibre

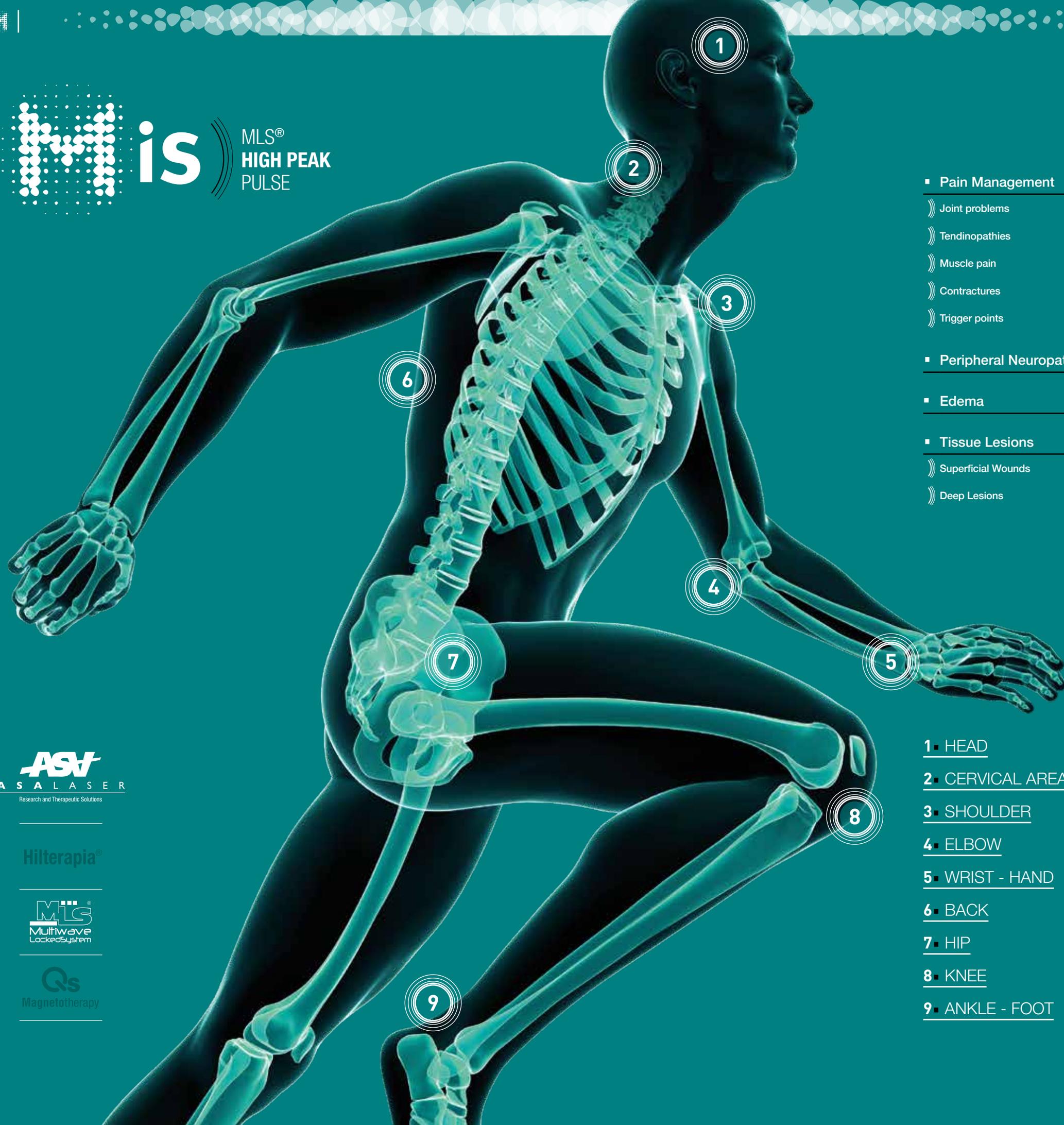
It combines in a single bundle the multisource power, maximizing the therapeutic performance. Flexible, handy and durable thanks to the internal steel sheath.





is

MLS®
HIGH PEAK
PULSE



▪ Pain Management

- » Joint problems
- » Tendinopathies
- » Muscle pain
- » Contractures
- » Trigger points

▪ Peripheral Neuropathies

▪ Edema

▪ Tissue Lesions

- » Superficial Wounds
- » Deep Lesions

1. HEAD

2. CERVICAL AREA

3. SHOULDER

4. ELBOW

5. WRIST - HAND

6. BACK

7. HIP

8. KNEE

9. ANKLE - FOOT

ASL
A S A L A S E R
Research and Therapeutic Solutions

Hiliterapia®

MLS®
Multiwave
LockedSystem

Qs
Magnetotherapy

MiS synchrony in action

The specific emission characteristics of MiS allow to act on the pain and its causes, for an early and scientifically proven result.

Anti-inflammatory action: treatment with MiS exerts a marked inhibitory action on the production of pro-inflammatory molecules.

Tissue repair action: treatment with MiS accelerates healing times and improves the quality of newly formed tissue.

Action on the pain and its causes: treatment with MiS induces a short and long-term analgesic effect and promotes a significant and lasting functional recovery because it does not only act on the pain symptomatology but also on the causes that determine it.

In addition to the therapeutic characteristics typical of the MLS® family, MiS finds an application in peripheral neuropathies, as demonstrated by ASAcampus scientific research.

The application of MiS in a recognized model of chronic neuropathic pain shows a clear and lasting reduction in pain symptomatology, accompanied by functional recovery.

From the biological point of view, the treatment with MiS promotes the recovery of the nerve fibres that have been damaged in the lesion area, as confirmed by histological and immunohistochemical evaluations. Specifically, sheath reorganization is important both for nerve trophism and conduction. Thus, MiS is particularly indicated for the treatment of neuropathic pain.

MiS cure

PAIN MANAGEMENT: Muscular, Articular, Tendinopathy, Contracture, Trigger Point.

ACTION
Marked anti-inflammatory action through the reduction of inflammation mediators.

RESULT
Significant decrease in pain, accompanied by functional improvement.

PERIPHERAL NEUROPATHIES

ACTION
Marked anti-inflammatory effect and lasting analgesic action. Promotes recovery and trophism of damaged structures.

RESULT
Significant and persistent improvement of pain symptomatology and concomitant recovery of functionality.

EDEMA

ACTION
Modulation of the microcirculation and reduction of the inflammatory component.

RESULT
Promotes fluid drainage and resorption of the edema.

TISSUE LESIONS: Superficial, Deep.

ACTION
Stimulation of tissue repair processes.

RESULT
Reduces healing times, improves the quality of the repair tissue and prevents the formation of fibrotic scarring.



MiS technology

TECHNICAL CHARACTERISTICS

- » 6 Pulsed laser diodes (PW) @905nm
- » 1 Continuous/Frequency-modulated laser diode (CW/FW) @808nm
- » Average power (max): 6W ± 20%
- » Peak power (max): 1kW

4 EMISSION METHODS

- » Synchronized Continuous/Frequency-modulated and Pulsed modulation at maximum peak power (MLS® HPP 808+905nm)
- » Synchronized Continuous/Frequency-modulated and Pulsed modulation (MLS® 808+905nm)
- » Single Continuous/Frequency-modulated modulation (808nm)
- » Single Pulsed modulation (905nm)
- » Frequency: variable according to modulation
- » Intensity: from 1% to 100%
- » Time: from 1 sec to 30 min

FEATURES

- » Over 25 control sensors for very high levels of performance and safety
- » Intelligent battery that keeps the device in stand-by when not connected to the mains
- » High resolution 10" LCD touchscreen
- » Integrated handpiece holder and optical terminals holder

POWER SUPPLY, DIMENSIONS, WEIGHT

- » Power supply: 100-240V 50-60Hz 70-90VA
- » Dimensions: 47.3 x 70 x 136 cm
- » Weight: 27 kg

TROLLEY

- » Unit carrying trolley with magnetic fixing system
- » 4 swivel wheels with self-locking system suitable for all floors
- » Glasses compartment

JOINTED ARM

- » Handpiece holder arm for fixed point use equipped with sphere and joints



LASER APPLICATOR

- » 1500 µm optical fibre
- » Patent pending mechanical system for rapid connection between handpiece and optical terminal, with integrated recognition system
- » Ergonomic handpiece with a button to control the emission and multicolour LED to indicate the status of the machine at any time

Handpiece with 5 cm optical terminal

- » 5 cm diameter homogeneous target area
- » Automatic adjustment of the parameters to optimize the intensity on the tissue
- » Ideal for the treatment of large anatomical areas homogeneously, reducing treatment times

Handpiece with 2 cm optical terminal

- » 2 cm diameter homogeneous target area
- » Collimated beam for maintaining the spot size both at contact and at a distance
- » Ideal for treating trigger points, intra-articular areas, muscle bands



Ø 5 cm



Ø 2 cm



MiS software

The innovation of MiS is also expressed in the user interface, where a high-resolution 10" touchscreen combines with an advanced, versatile, and intuitive software. The high operational flexibility allows it to adapt to the experience of different users and is easily updatable via USB.



The system includes predefined protocols that are dynamically determined according to the selected anatomical area, the pathology, the characteristics of the patient, and the clinical phase.

Each predefined protocol includes indications of the area to be irradiated with illustrations and videos; the user can also set the dimensions of the treatment area by drawing it directly on the screen.

Total autonomy for setting the treatment parameters in the manual area and possibility to set and store programs in the personal area.



In order to guarantee maximum safety and high levels of performance, the system is able to generate dynamic QR Codes for sending data to the ASA Service allowing remote control of the device.





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