



VETERINARY



ASV
A S A L A S E R
V E T E R I N A R Y

Research and Therapeutic Solutions



ADI Design Index 2021
SELECTED - Design for Work



IDA Design Awards 2021
GOLD WINNER - Interface Design



Since **1983** ASA wants to become the international landmark in **laser therapy** and **magnetotherapy** for multidisciplinary uses: from **Physiotherapy** to **Physical Rehabilitation**, passing through Pain Management, **Sports Medicine** and **Veterinary Medicine**.

Research and **innovation** are the main investment channels and the foundations on which to build an **ethical, sustainable and valuable growth**.

ASA: RESEARCH AND THERAPEUTIC SOLUTIONS

2003

ASA becomes part of **EI.En. Group**, an Italian multinational corporation among the world's leading manufacturers of lasers for medicine, industry, conservation and restoration of artistic heritage. In addition, ASA launches **MLS® Laser Therapy** applied in the human field.

2009

ASA launches **MLS® Laser Therapy** applied in the **veterinary field**.



THE HISTORY

2003 was a particularly significant year for ASA, which launched the **MLS® Laser Therapy** (Multiwave Locked System) in the human field, marking a turning point in the treatment of painful diseases through the control and modulation of the emission, which allow distributing the energy homogeneously and obtaining **evident therapeutic results**.

The **coordinated and synchronised action** of multiple laser emissions with different wavelengths - pulsed and continuous - allows to penetrate deep into the tissues, facilitating the activation of the photoreceptors and, at the same time, involving a large volume of tissue, for a **deep and effective action**.

Applied in the veterinary field since 2009, **MLS® Laser Therapy** goes beyond the limits of traditional laser therapy by enhancing the anti-inflammatory, anti-edema and analgesic effects and ensuring **fast and effective treatments** right from the first sessions, as well as long-lasting results.





MLS® INNOVATION & RESEARCH

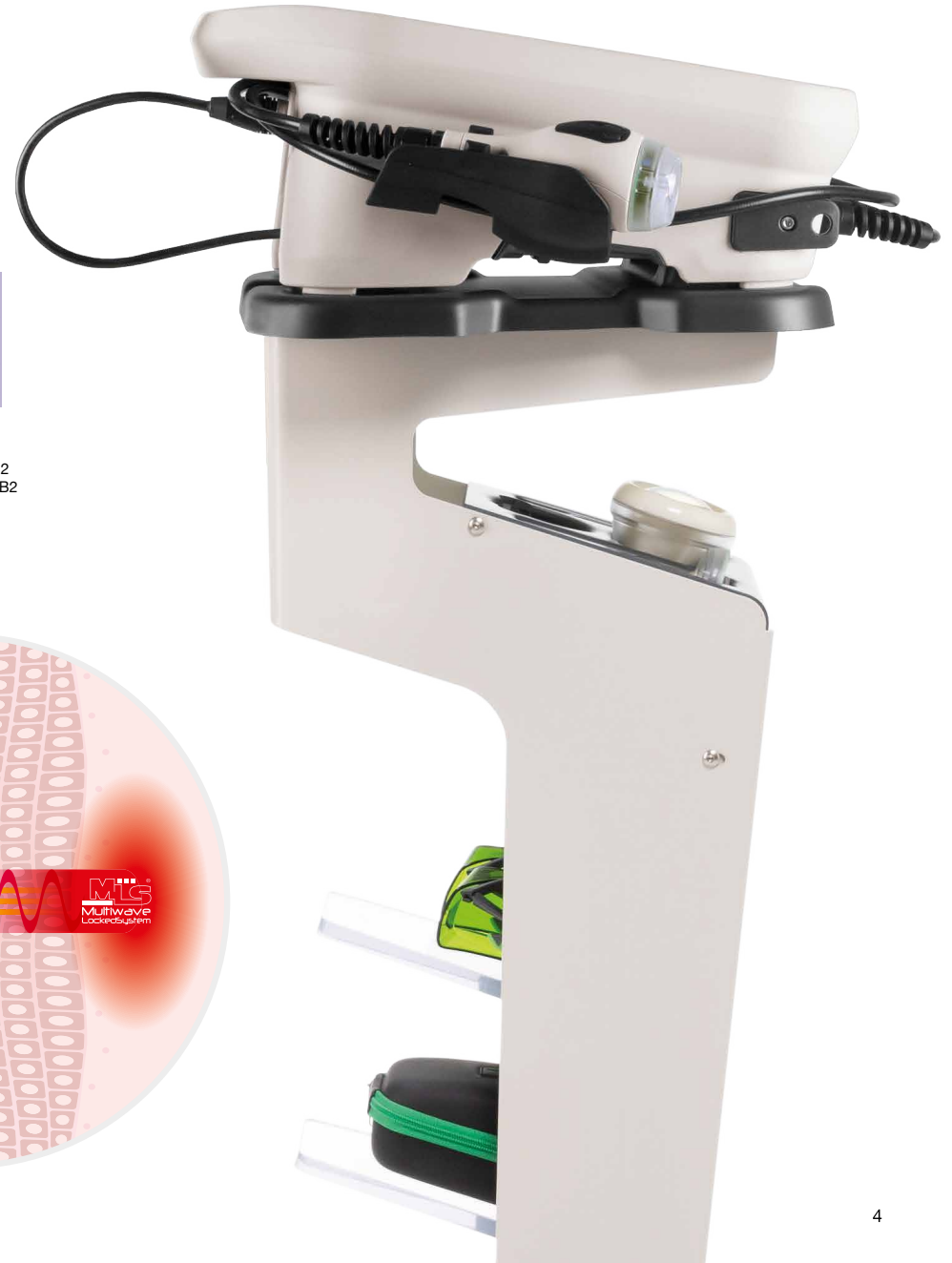
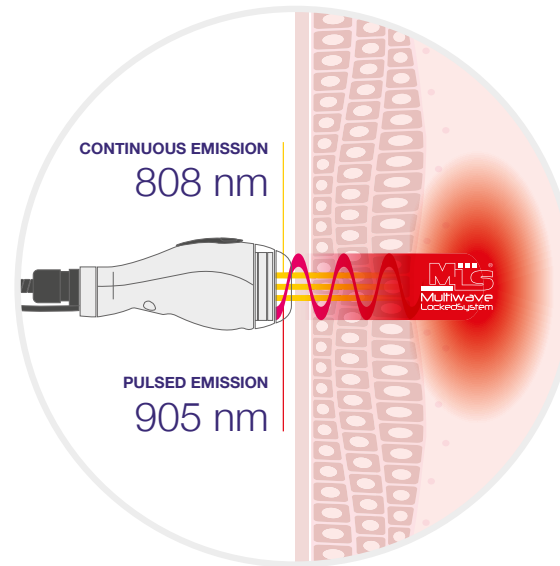
A further distinctive feature of MLS® Laser Therapy is the **high level of safety** of its application, modulated through energy dosages, which are the result of clinical experience gained through years of experience in the field, as well as its global approach to the therapeutic universe promoted by the **scientific research by ASAcampus**.

The scientific research of **ASAcampus** is a distinctive element of ASA, which allows to carry out *in vitro* and *in vivo* studies, up to clinical validation. Many projects have been carried out in collaboration with centres of excellence and end users all over the world and the dissemination of the results accounts for **over 200 publications** in scientific journals.

M-VET was born from the proven effectiveness of applying the therapeutic principles of the MLS® pulse to the world of veterinary therapies. M-VET inherits MLS® pulse wavelengths, the characteristic synchronised modulation of continuous and pulsed emissions, the scientific evidence of its mechanisms of action, as well as the safety of a treatment which is established worldwide.



United States
patents N°:
US 8,251,982 B2
US 10,874,872 B2

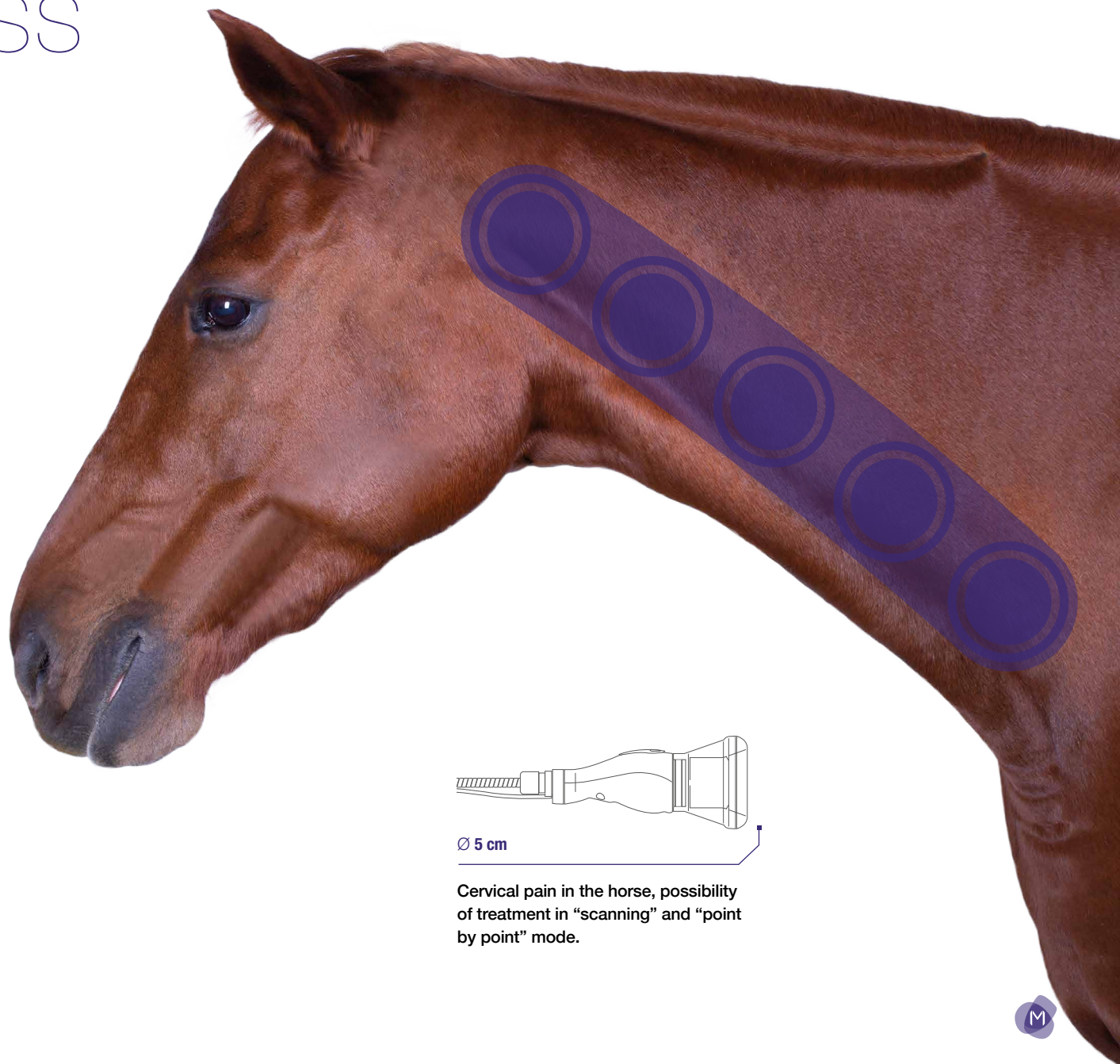


EFFECTIVENESS IN ANIMAL HEALTH

M-VET collects the scientific and technological know-how of over thirty years of ASA Research and Development in a **new generation** of therapeutic devices branded ASAveterinary, entirely dedicated to animal health.

The benefits of the **MLS®** synchronised impulse are now enhanced through an optical fibre technology, which allows conveying **higher intensity** energy packets inside the tissues, in total safety.

The experience gained with Mphi Vet and Mphi Vet Orange has allowed enhancing the pulse, favouring the 905 nm pulsed component: the high and instantaneous peak power, the shortness of the pulses and a controlled average power thus guarantee the **effectiveness of the treatment** and the execution of the therapy, according to the principles of **patient safety and protection**.



Ø 5 cm

Cervical pain in the horse, possibility of treatment in “scanning” and “point by point” mode.

M-VET SYNCHRONY IN ACTION

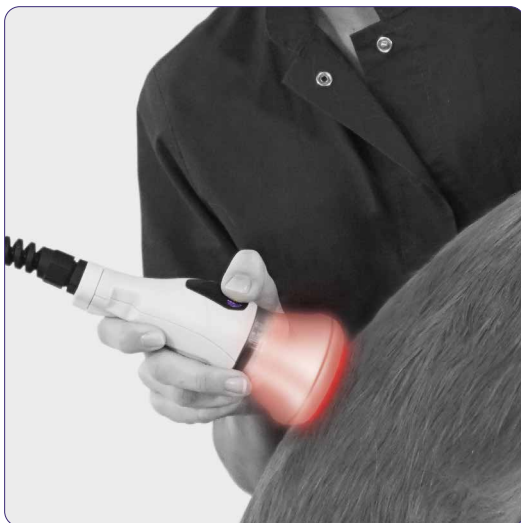
The special features of the **M-VET** emission allow to intervene not only on pain but also on its causes, as part of a path with scientifically proven, **fast and long-lasting results**.

Anti-inflammatory action: M-VET treatment exerts a significant inhibitory action on the production of pro-inflammatory molecules.

Action on pain and its causes: M-VET treatment produces short and long-term analgesic effects, allowing a significant and progressive function recovery, since its action is not limited to the painful symptomatology but acts simultaneously on the causes which determine it.

Tissue repair action: M-VET treatment improves the quality of the newly formed tissue and accelerates healing times.

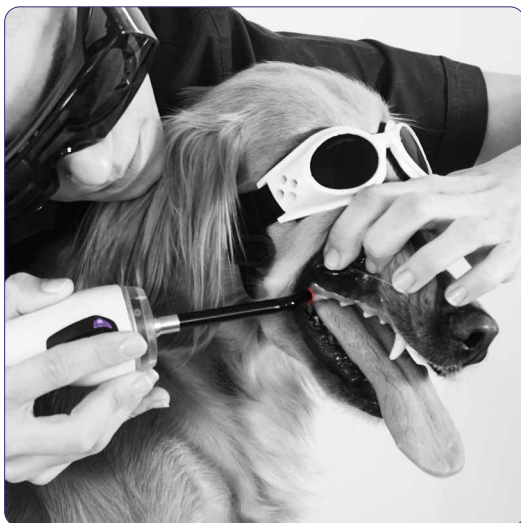




▲ MUSCULOSKELETAL SYSTEM



▲ DERMATOLOGY



▲ ORAL PATHOLOGIES



▲ LASER PUNCTURE



► MUSCULOSKELETAL SYSTEM

Muscle & Joint pain, Tendinitis, Contracture, Trigger Point, etc.

► **Action:** effective anti-inflammatory action through the reduction of inflammatory mediators.

► **Outcome:** significant decrease in pain and functional improvement.

► DERMATOLOGY

Tissue lesions, Alopecia, Foot-pad dermatitis, etc.

► **Action:** stimulation of tissue repair processes.

► **Outcome:** prevention of fibrotic scars formation, improvement in the quality of the repair tissue, acceleration of healing times.

► ORAL PATHOLOGIES

Gingivitis-stomatitis, Fistulas of the oral cavity, etc.

► **Action:** analgesic and anti-inflammatory action; stimulation of tissue repair.

► **Outcome:** rapid improvement of symptoms and possibility of association with other treatments.

► LASER PUNCTURE

Frequencies and Pathologies.

► **Action:** stimulation of acupuncture points to rebalance the flow of energy.

► **Outcome:** painless, quick and safe in case of animal's sudden movement during treatment.

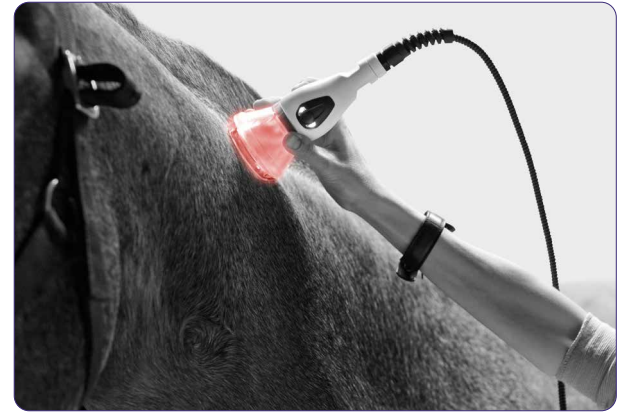
EFFECTIVENESS & SIMPLICITY

With **M-VET**, ASAveterinary consolidates a leadership position in the field of veterinary therapies by virtue of unprecedented characteristics in terms of **practicality**, ease of use and state-of-the-art technology.

The aspects of increased **versatility** include the multiple modes of use of the device - which can be used positioned on a **trolley**, **on the floor** or **worn with its shoulder strap** – as well as the immediate **interchangeability** and recognition of the various **lenses** within the software with the consequent **automatic adaptation of the predefined** parameters.

The fact that it is **easy to transport** and very **robust** enables a rapid and intensive use. The presence of a single handpiece with different lenses and an intuitive and **user-friendly** state-of-the-art technology, guarantee a unique experience in terms of simplicity and performances.





M-VET TECH PLUS

Safety, homogeneity of treatment, peak power and ergonomics are just a few of the features which ensure M-VET is the **top-quality product in the field of veterinary therapies.**





Enhanced MLS®

For an even deeper action, M-VET inherits the therapeutic superiority of the MLS® synchronised emission, enhancing its power, especially the peak power of its pulsed component, for a result of long-lasting efficacy and proven therapeutic superiority.



Homogeneity of treatment

Optical technology allows uniformity of the beam profile and the homogeneous distribution of energy over the target area, while the spatial overlap between the different wavelengths ensures the spread of the appropriate energy mix over the whole area undergoing treatment.



Optical fibre

Manageable, flexible and resistant: the optical fibre is protected by a double sheath, which allows maximising the therapeutic performances, merging the multisource power in a single bundle. Very high emission quality and practicality: the state-of-the-art to support veterinarians.



Ergonomics and practicality

The multifunctional handpiece is light and compact. The connection system of the four lenses allows immediate interchangeability and automatic adaptation of the treatment parameters; all lenses can also be used outdoors thanks to an exclusive lens case to be attached to the shoulder strap.



Back-up System

A back-up system recognises when the device is no longer connected to the mains and instead of switching it off, keeps it on stand-by until a battery is inserted. M-VET has been developed to ensure continuity and precision in all conditions, both in case of a voltage drop or when using the device outdoors.



Quality of the materials

Resilience and comfort merge thanks to the use of innovative materials which ensure M-VET is lightweight, pleasant to the touch and ultra-resistant against knocks, scratches and bites. M-VET is a device which can be used on a daily basis in close contact with the animals, without fear of endangering its integrity.



Game Changer Technology

The experience gained in the human field is shared in veterinary medicine, primarily by optimising the optical fibre coupling of pulsed and continuous laser sources. The user interface is immediately understandable and navigation is fluid and intuitive. The technological evolution allows to customise treatments in total safety, to create endlessly replicable tailored protocols as well as to view customised statistics on the use of M-VET.



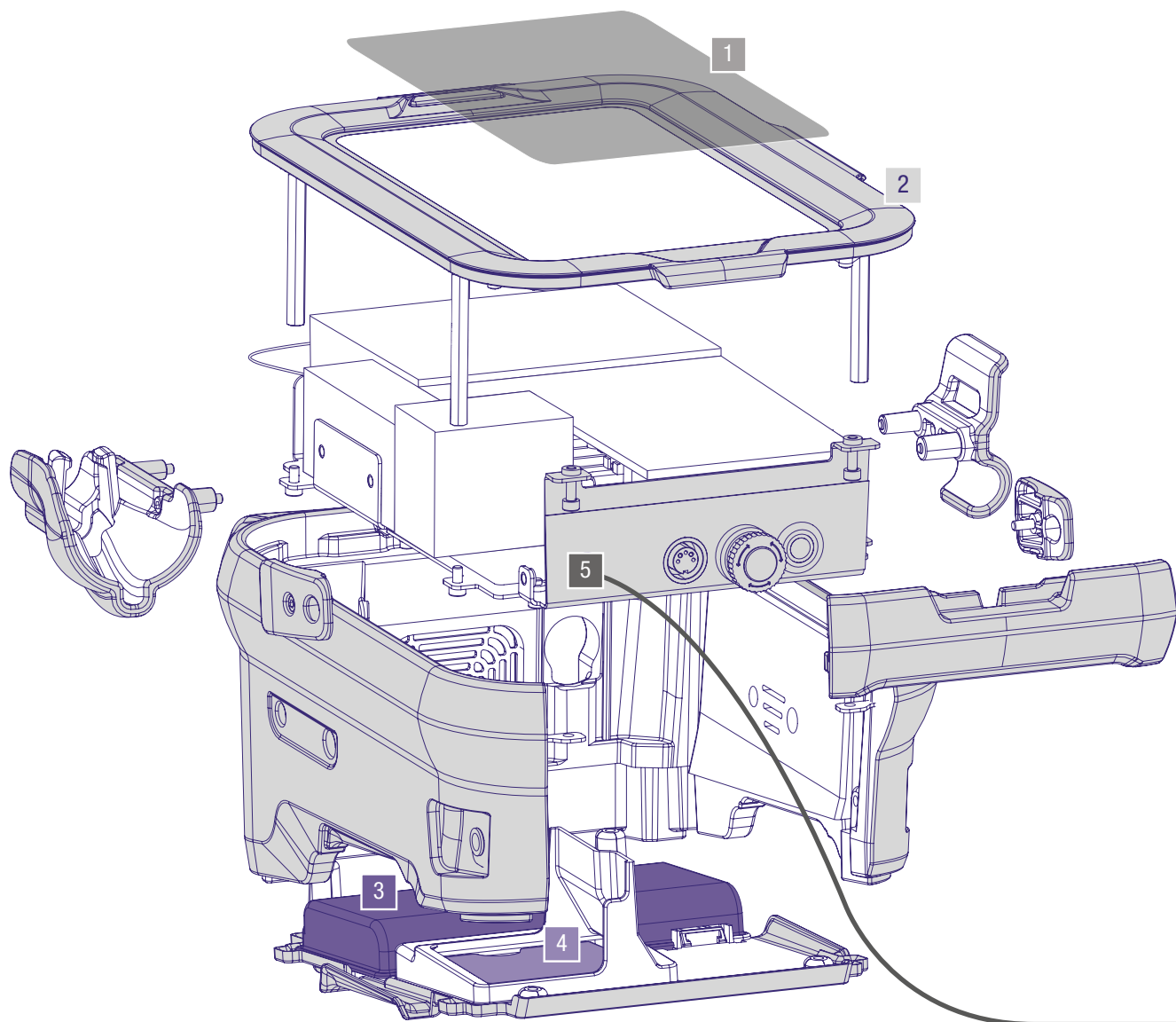
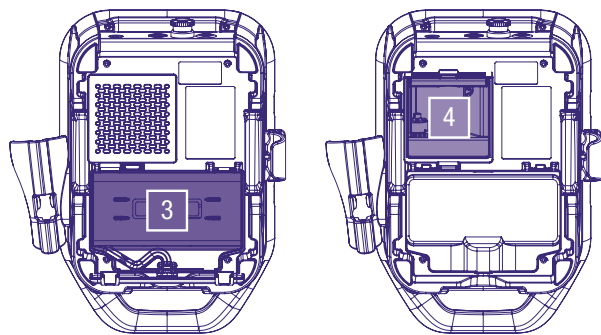
Safety

The modulation of high power through very short pulses allows to stimulate biological processes whilst observing strict control of the thermal effect and thus ensuring safety of treatment, always the mainstay of the ASA devices.

HIGH TECHNOLOGY DESIGN

M-VET stands out for the **elegance** of the design and the **ease of use**, in a device conceived to combine the quality and durability of the materials with the necessary **ease of handling** and freedom of movement in all contexts, both in the clinic and outdoors.

The attention to the single detail translates into an unprecedented **versatility** of application: thanks to the flexibility and resistance of the optical fibre, to the ergonomic handpiece and to the immediate interchangeability of the lenses, M-VET ensures **speed and efficacy** for a complete and homogeneous treatment.



10.1" TOUCH SCREEN

1

The high brightness guarantees excellent visibility in both clinical and outdoor environments.

EXTERNAL BODY

2

The external surface is made of soft material, pleasant to the touch, while ensuring high resistance to impact and possible scratches and bites by patients.

BATTERY COMPARTMENT

3

Possibility of immediate access for use without connection to the power supply.

MAINTENANCE COMPARTMENT

4

It guarantees protection of the internal components and ease of intervention.

OPTICAL FIBRE

5

Flexible, easy to handle and robust, the fibre is protected by a double sheath to ensure an easy and safe treatment experience.

TERMINALS

Lens - Ø 2 cm - 3 cm²

Versatile lens suitable for any type of application for all types of animals.

Lens - Ø 5 cm - 20 cm²

Homogeneous irradiation of large volumes of tissue in a short time, from contact up to 30 cm distance. Ideal for treating large animals.

Lens - Ø 4 mm - 0.13 cm²

Conical light guide: designed for laser puncture treatment in a rapid, targeted and painless manner.

Lens - Ø 8 mm - 0.5 cm²

Curved light guide: ideal for the treatment of oral pathologies or for small animals.



M-VET TECHNOLOGY



TECHNICAL FEATURES

- ▶ Laser source with impulse in MLS® mode up to 3.6 W
- ▶ Peak power outside handpiece: 270 W
- ▶ MLS® modulation in CPW and FPW (synchronised emission of Continuous Pulsed Wave and Frequenced Pulsed Wave)
- ▶ MLS® pulse modulation frequency from 1 to 2000 Hz in 1 Hz steps
- ▶ Power level from 1% to 100%
- ▶ Lens with target area highlighted by high efficiency red light LEDs
- ▶ Automatic recognition of the lens
- ▶ 10.1" high brightness LCD touchscreen display
- ▶ Intelligent back-up system
- ▶ Pre-set programs for pets, horses, reptiles, birds and exotic mammals
- ▶ Programs section for laser puncture
- ▶ Programs section for diseases of the oral cavity
- ▶ Viewing treatment images
- ▶ Possibility of customising each treatment parameter
- ▶ Reserved area to save personal protocols
- ▶ Treatment time from 1" to 30'00" in steps of 1"
- ▶ Automatic calculation of the energy emitted according to the parameters set
- ▶ Treatment log
- ▶ Usage statistics and updatable software via USB

POWER SUPPLY, DIMENSIONS AND WEIGHT

- ▶ Lithium-ion battery
- ▶ 100-240 V AC 51-68 VA 50/60 Hz external power supply unit
- ▶ 35 x 30 x 15 (W x D x H) cm; 4 kg (M-VET)
- ▶ 52 x 50 x 92 (W x D x H) cm; 21 kg (M-VET + trolley)
- ▶ 57.2 x 42.5 x 23.9 (W x D x H) cm; 9 kg (M-VET All Terrain)





ACCESSORIES PROVIDED

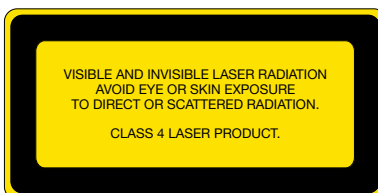
- ▶ 4 lenses: Ø 4 mm (0.13 cm²), Ø 8 mm (0.5 cm²), Ø 2 cm (3 cm²), Ø 5 cm (20 cm²)
- ▶ N° 2 Laser Safety Goggles
- ▶ Unit carrying case
- ▶ Shoulder strap for portable use
- ▶ Lens case attachable to the shoulder strap

OPTIONAL ACCESSORIES

- ▶ Trolley: with storage compartment, 4 swivel wheels and selflocking system.
- ▶ Battery kit: consisting of an exclusive charger, battery and connection cable, it allows the device to be used throughout the day without the need to plug it into the mains.
- ▶ Heavy duty case M: a lightweight, resistant to wear, water and dust heavy duty case for M-VET. 100 % recycled materials, IP65 watertight seal, telescopic + fixed ergonomic handles.

ALARMS AND SAFETY EQUIPMENT

- ▶ Laser emission warning light
- ▶ Interlock
- ▶ Acoustic signal adjustable by the operator
- ▶ Date and time
- ▶ Password to operate the device
- ▶ Language option
- ▶ Ready to be connected to the remote Laser emission signalling device

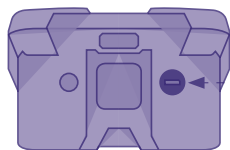
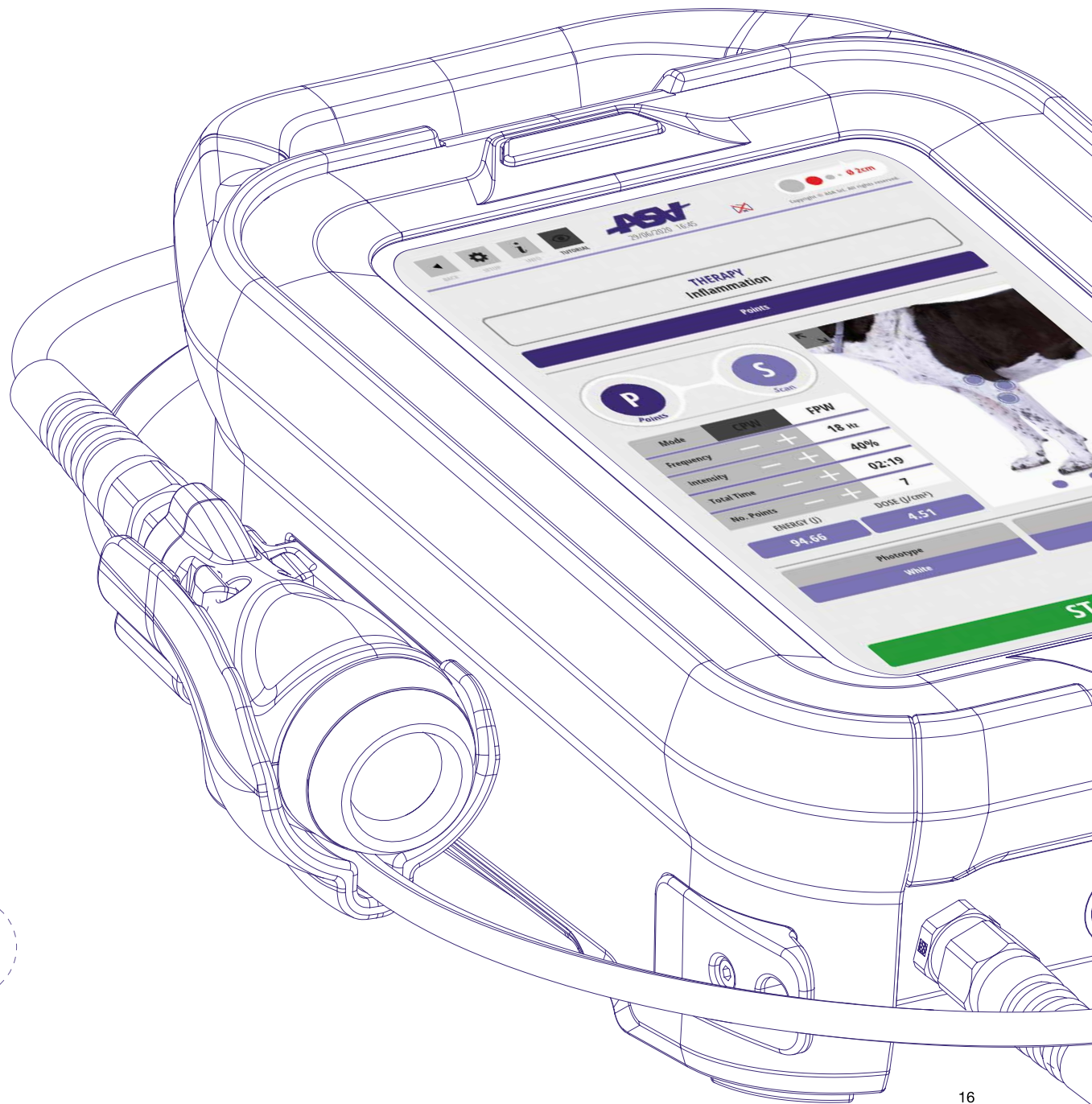


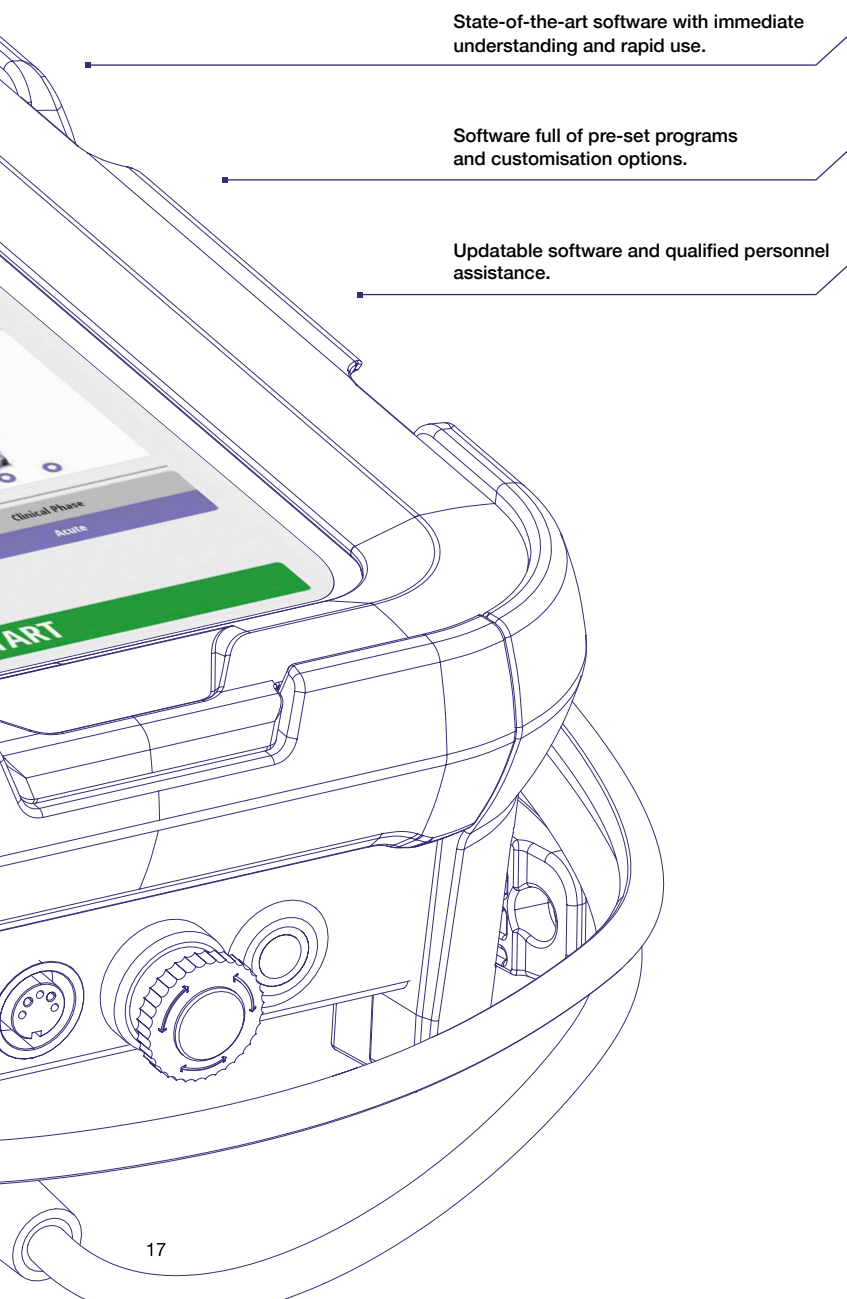
M-VET SOFTWARE

The innovation of **M-VET** extends to the user interface, equipped with a **10.1" high brightness touch screen** and a latest generation software for an unprecedented user experience.

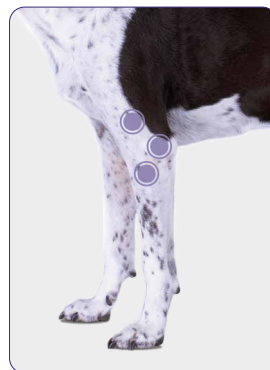
Easily upgradeable via USB port, **thanks to its flexibility it fits to the use experience of the different users** and includes predefined protocols dedicated to the **care of dogs, cats, horses and exotic animals** which are implemented according to the selected anatomic area, the pathology of interest, the patient's characteristics and the clinical phase.

In order to ensure **maximum safety** and high levels of performance, the system is able to generate dynamic QR codes for sending data to the ASA Service for the check-up of the device.

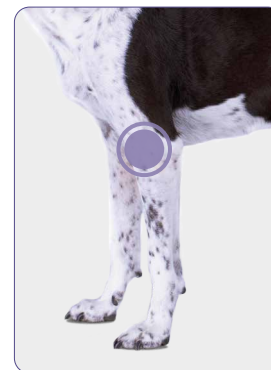




▼ Lens Ø 2 cm: point by point.



▼ Lens Ø 5 cm: point by point.



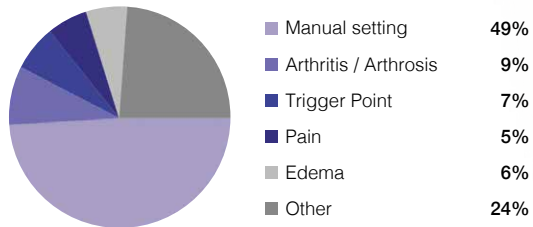
▼ Lens Ø 2 cm, Ø 5 cm: scan.



M-VET SOFTWARE

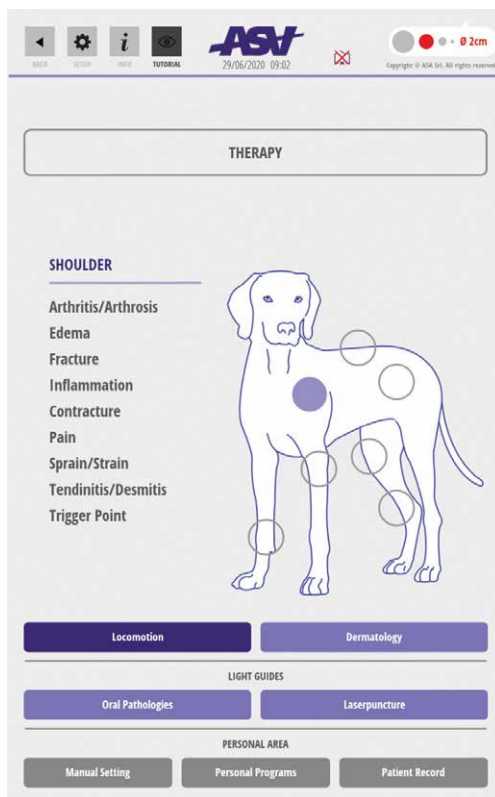
The initial screen allows to select the desired animal species, guiding the user in identifying the **most suitable protocol**, while a series of illustrations accompanies protocol indications, providing the **possibility of customising the area** to be treated by drawing it directly on the screen.

The possibility of establishing and **saving the programs in the personal area**, the complete autonomy of the treatment parameters in the manual area and the possibility of keeping a record of the treatments performed on each patient allow a highly flexible and customisable use in order to provide the most efficient and functional service to the operator and patient.

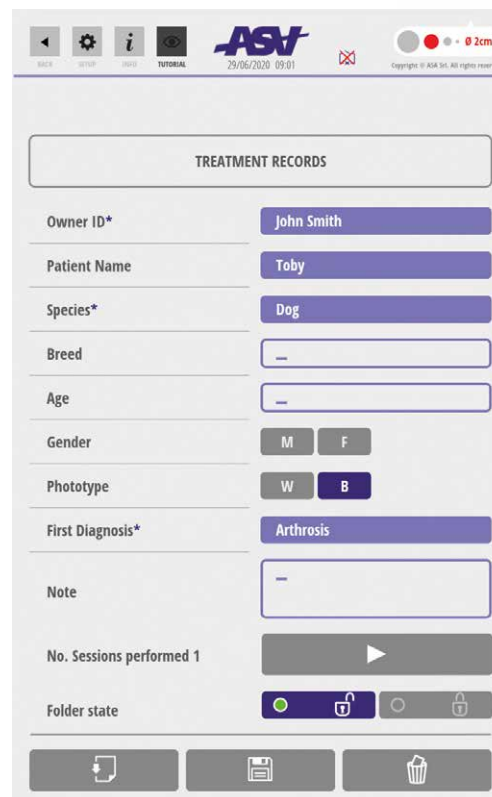


▲ Immediate feedback on the use of the device thanks to the usage statistics.

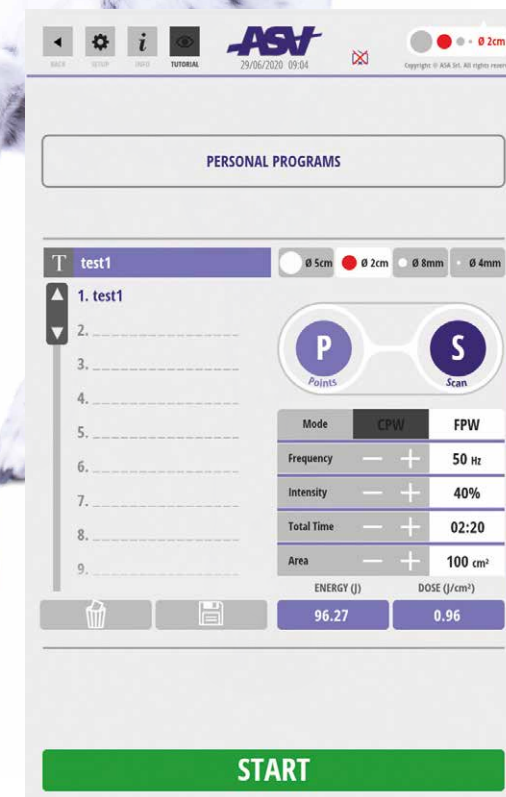




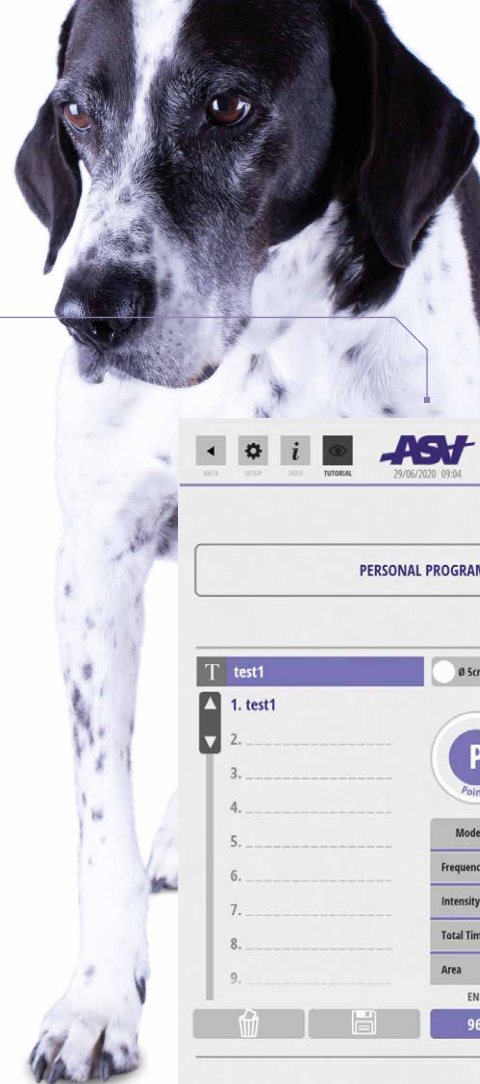
Ready to use: very rich in predefined protocols divided into corresponding body regions.



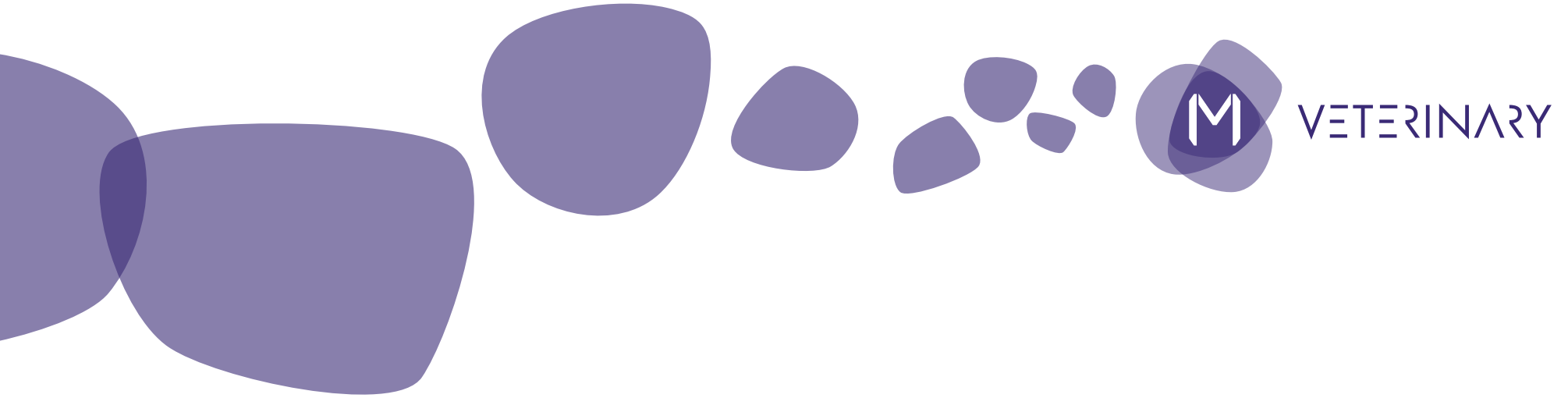
Complete: management of patient data and saved history of the treatments performed always to hand.



Customisable: the personal area allows the creation and saving of free programs, leaving the maximum degree of customisation to the user.









CORPORATE HEADQUARTERS / REGISTERED OFFICE

Via Galileo Galilei, 23 / 36057 Arcugnano (VI) - Italy
T +39 0444 28 92 00 / F +39 0444 28 90 80

asavet@asalaser.com

RESEARCH DIVISION / BRANCH

Joint Laboratory Department of Experimental and Clinical
Biomedical Sciences University of Florence
Viale G. Pieraccini, 6 / 50139 Firenze - Italy

asacampus@asalaser.com