



# FISIOSONIC<sup>®</sup>

THE MULTIFREQUENCY ULTRASOUND IN CLASS E



**Fisiosonic®** is a new **device for ultrasound therapy**, using an **innovative output stage called Class E**. The mechanical efficiency obtained through the output stage in Class E is decidedly higher than the one that can be obtained by means of traditional output stages and allows the operator to issue high powers on the patient in a constant and controlled way in relation to impedance of the tissues and with a limited thermal effect.

**Fisiosonic®** is a last generation ultrasound device that uses **1-3MHz multifrequency applicators**. These frequencies can be used separately or in joint mode during the treatment.

Besides traditional methods, **Fisiosonic®** has introduced two innovative functions: **sequential treatment** and **automatic frequency switching**.

The **sequential treatment** offers the operator the opportunity of using **multidisc scanning applicators** with a wide contact surface to be applied by common elastic straps. The ultrasound emission is sequential and allows the operator to carry out an automatic treatment on a wide surface with no need for a manual dedicated intervention.



### Indications:

**EPICONDYLITIS**

**MUSCULAR LESIONS**

**IMPINGEMENT  
SYNDROME**

**TENDINITIS**

**FIBROUS ADHESIONS**

**FIBROMYALGIA**

**MUSCULAR TENSIONS**

**MUSCLES  
CONTRACTURES**

**ACTIVE HYPERAEMIA**

The **automatic frequency switching** is obtained by the exclusive **A.F.S. (AUTOMATIC FREQUENCY SWITCHING) device**. This device makes it possible to exploit the various focalizations of 1 and 3 MHz frequencies at the same time, allowing to set different supplying times for each frequency. This feature allows the operator to obtain a focalized action.

The applicators are waterproof for underwater treatments.

The instrument can be operated in **two modes: continuous** and **pulsed**. The pulsed operating mode permits to modulate the energy (duty-cycle from 10% to 90%) in order to reduce the thermal effect and keep the peak pressure applied by the acoustic wave on the tissues steady. The output power density can be adjusted from 0 W/cm<sup>2</sup> to 3 W/cm<sup>2</sup>.

**Fisiosonic®** is equipped with **self-calibration system** and **visual and sound contact control system**. The appliance is equipped with an inlet for electrotherapy appliance connection (Modulo series); the operator can then carry out a **combined therapy** with any applicator.

**Fisiosonic®** is equipped with a **library of preset therapeutic protocols** focused on severe and chronic pathologies. It provides the operator the **option to create customized programs** for a patient and indicated for specific pathologies or areas to be treated, for rapid and efficient therapies.

The user interface, equipped with keyboard and graphic display, has a decidedly modern and professional look.

OPTIONAL ACCESSORIES:

- A - Multifrequency applicator Ø 21mm.
- B - Rotary multidisc scanning multifrequency applicator.
- C - Multidisc scanning multifrequency applicator.
- D - Double multidisc scanning multifrequency applicator.
- E - Elastic band.
- F - Multifrequency applicator Ø 55mm



## AVAILABLE ALSO IN TOUCH SCREEN VERSION

The interface of **Fisiosonic®** in **Touch Screen** version displays the parameters on a **large color display** that allows to **remotely read** and gives to the operator the possibility to **select, modify and keep always under control** the functions and the working parameters.

A unique feature of **Fisiosonic®** touch-screen version is the **Wizard**, a **step-by-step digital guide** to use the device.

Thanks to an **intuitive software**, the Wizard leads the operator in selecting the **therapeutic preset protocols** focused on **severe and chronic pathologies**.



### PRESET PROTOCOLS

**RAPID RESEARCH WITH THE INNER FINDER**  
for pathology, n. of program, body area

### SELECTION FREE PROTOCOL

frequency, frequency switching, duty-cycle, duration

### CREATION OF PERSONALIZED PROGRAMS

Saving data sets, 100 free storage locations, multiphase programs up to 4 phases

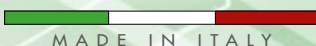
### UPGRADABLE VIA USB PORT

## TECHNICAL FEATURES

- MODEL: FISIOSONIC®
- COMMERCIAL CLASSIFICATION: equipment for ultrasound therapy in Class E.
- TECHNICAL CLASSIFICATION: medical device, Class I type BF.
- MEDICAL DEVICE CLASS: : IIa (Dir. 93/42/EEC, modified by the Directive 2007/47/EC).
- REFERENCES STANDARDS: IEC 60601-1, IEC 60601-2-5, IEC 60601-1-2, IEC 60601-1-6, IEC 61689.
- SIZE: 210x300x140 mm.
- WEIGHT: ≈ 3 Kg.
- POWER: ~230V single phase (~115V available upon request).
- LINE FREQUENCY: 50-60 Hz.
- POWER CONSUMPTION: 80VA.
- LINE FUSES: 1,6A delayed.
- LINE TRANSFORMER: isolation between main and secondary windings 4000V.
- ULTRASOUND FREQUENCY: 1-3MHz
- POWER DENSITY ON THE TRANSDUCERS: it may be regulated continuously 0÷3 W/cm<sup>2</sup>.
- OUTPUT POWER: Max. 15W.
- OPERATING MODE: continuous (CW) and pulsed.
  - a) Continuous mode: ultrasound energy is generated continuously and the output power density is selected by the user
  - b) Pulsed mode: modulation with adjustable frequency from 1 to 200Hz with duty-cycle ranging from 10% up to 90%.
- Visual and sound contact CONTROL SYSTEM and SELF-CALIBRATION SYSTEM.
- ENTRANCE for the connection to the electrotherapy devices (Modulo series).
- DISPLAY:
  - Backlit Graphic display
  - 4.3" Color Touch Screen Display OPTIONAL
- TIMER: treatment time ranging from 1 min up to 30 min., with resolution 1 min.
- ACOUSTIC SIGNAL at end of treatment.
- PRESET PROGRAMS: 40 for the main pathologies.
- FREE PROGRAMS: 100 user's programs.
- STANDARD ACCESSORIES: Multifrequency applicator Ø 35mm 1/3 MHz - 5 cm<sup>2</sup> surface - Bottle of ultrasound gel - Power supply cable - User Manual
- OPTIONAL ACCESSORIES:
  - Multifrequency applicator Ø 21mm 1/3 MHz - 1cm<sup>2</sup> surface.
  - Multifrequency applicator Ø 55mm 1/3 MHz - 10cm<sup>2</sup> surface.
  - Rotary multidisc scanning multifrequency applicator (3 discs) 1/3 MHz - 32cm<sup>2</sup> contact surface.
  - Multidisc scanning multifrequency applicator (3 discs) 1/3 MHz - 52cm<sup>2</sup> contact surface .
  - Double multidisc scanning multifrequency applicator (6 discs) 1/3 MHz - 52cm<sup>2</sup> contact surface each applicator.
  - Trolley.
  - Soft case.
- **CE** MARK : device complying with Directive 93/42/EEC, modified by the Directive 2007/47/EC.



FISIOLINE® instruments are covered by UNIPOLSAI product liability insurance.



### Fisioline® srl

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Technical features and sizes of the devices described herein may be subject to change, based on technological evolution and constant improvements to production.