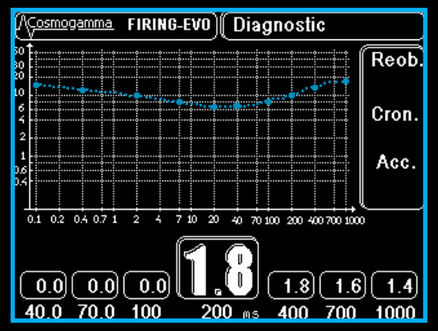
I/T CURVE:

Automatic definition of the **Intensity / Time curve** for partially denervated muscles. Automatic calculation of rheobase (minimal electrical amplitude of infinite duration that results in the contraction of a muscle), chronaxie (minimum time over which an electric current double the strength of the rheobase needs to be applied, in order to stimulate a muscle fiber or nerve cell) and accommodation index. Possibility of saving the I.T. curve in the database.

Here is a sample of an I.T. curve:



STIMULATION MODES:

Tens: It features many resident programs for most common pathologies. Frequency: 2÷200 Hz. Pulse duration: 50÷600 µs. Intensity: 0÷250 mA (Ipp).

Muscle: symmetrical bidirectional pulses. Features a file with a number of programs for the treatment of different muscle conditions. Frequency: 2÷200 Hz. Duration: 50÷600 µs. Intensity: 0÷250 mA (Ipp).

Bipolar interferential current: amplitude-modulated square-wave bidirectional current. Square-wave frequency: 4000 Hz. (± 20 %). Sinusoidal frequency of modulation: 5÷200 Hz. Intensity: 0÷250 mA (Ipp).

Tetrapolar interferential: amplitude-modulated bidirectional current. Sinusoidal frequency 2000÷5000 Hz. Sinusoidal frequency of modulation 5÷200Hz. Intensity 0÷250 mA (Ipp)

Burst: rectangular bidirectional symmetrical pulses. Action: 0,25 s. Pause: 0,75 s.

Kotz: Interrupted sinusoidal current. Sinusoidal frequency: 1000÷2500 Hz. Modulation frequency: 5÷200 Hz. Intensity: 0÷250 mA (Ipp).

Traebert: rectangular, unidirectional current. Pulse duration: 2 ms. Pause: 5 ms. Intensity: 0÷30 mA (Ip).

AMF: rectangular bidirectional symmetrical pulses. Rise: 2 s. Fall: 1 s. Rest: 2 s.

Faradic current: Unidirectional pulses. Frequency: 1÷100 Hz. Intensity: 0÷130 mA (Ip).

IONO **Iontophoresis:** interrupted unidirectional current. Frequency: 8000 Hz. Intensity: 0÷30 mA (Ip).

FM: rectangular bidirectional symmetrical pulses. Sweep adjustable from 2÷10 Hz. Duration of pulses adjustable.

Diadynamic currents: single-phase (MF), two-phase (DF), short-period (CP), long-period (LP). Intensity: 0÷30mA (Ip).

Triangular/Exponential Pulses: triangular unidirectional pulses. Duration: 1÷1000 ms. Pause: 1÷5 s. Intensity: 0÷30 mA.

Rectangular Pulses: rectangular unidirectional pulses. Duration: 1÷1000 ms. Pause: 1÷5 s. Intensity: 0÷30 mA.

Agonist/Antagonist: rectangular bidirectional symmetrical pulses. Stimulation agonists/antagonists muscles.

Agonist/Antagonist with Fardic current: unidirectional pulses. Frequency: 1÷100 Hz.Intensity: 0÷130 mA (Ip).

Agonist/Antagonist with Kotz current: Interrupted sinusoidal current. Sinusoidal frequency: 1000÷2500 Hz. Modulation frequency: 5÷200 Hz. Intensity: 0÷250 mA (Ipp).

I/t **Diagnostics:** recording of the intensity/time curve. Automatic calculation of rheobase, chronaxie, accomodation coefficient and drawing of the curve. Possibility to memorize the results and records it on the database.

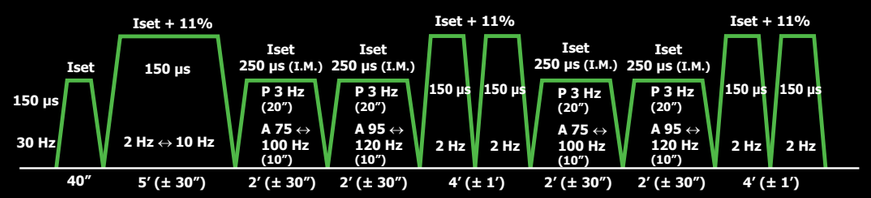
High Voltage mod.: double unidirectional pulse. Polarity: positive or negative. 200 V on 5 KOhm. 160 mA on 500 Ohm.

Urology: bidirectional symmetrical pulses. Frequency: 2 ÷ 200 Hz. Pulse duration: 50÷600 µs. Maximum current: 250 mA (Ipp). Output characteristic: constant voltage (CV).

M.P.P.® SYSTEM (MULTI PARAMETERS PROTOCOLS):

It means **Multi Parameters Protocols** that are included in the FIRING stimulator equipped with a new generation microprocessor.
M.P.P.® are extremely complex protocols that are reproducing the physiological muscular contraction. During the M.P.P.® treatments, the energy levels of every single phase, the dose frequencies, frequency sweeps, the frequency of the pauses are adjusted automatically and continuously during the program.

Here is a sample of a graphic M.P.P.® system:



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FIRING EVO

EXCEPTIONAL RANGE OF PRESET PROGRAMS

- TWO FULLY **INDIPENDENT CHANNELS**
- HUGE QUANTITY OF **PRESET PROGRAMS** AVAILABLE
- POSSIBILITY OF **CREATING/SAVING YOUR OWN PROGRAMS**
- **HIGH POWER** OUTPUT
- EXTREMELY **SIMPLE** TO OPERATE
- M.P.P.® **SYSTEM**: "MULTI PARAMETERS PROTOCOLS"

FIRING

(7F00) DUAL-CHANNEL ELECTROTHERAPY

FIRING is a the state of the art portable stimulator for Physiotherapy/Rehabilitation. Using the most advanced electronic technology combined with the extremely simple user interface, FIRING will satisfy the most demanding physiotherapists. Great attention was paid to the development of complex algorithms monitoring operation at any time.

In a modern and sleek design, the unit is packed with INNOVATIVE features:

- A huge **preset library of programs** for most pathologies. These programs (together with the large number of waveforms included in the machine) will make FIRING the most comprehensive toolkit available in the market.
- Possibility of creating and saving **user-defined programs**.
- **Patient database**: store patient data with treatment history.
- **Two completely independent channels** individually programmable.
- Improved **output power**.
- **Pain level evaluation** for each recorded patient at the beginning and at the end of the treatment.
- **Diagnostic analysis** with Intensity/Time (I/T) curve.(*)
- **Perineal Treatments** with preset programs.
- Widest selection of **currents / waveforms** used both in rehabilitation and pain therapy.(*)
- *M.P.P.*® **System: extremely complex programs** and protocols that will change frequency, duration pulse, sweep, rest/action frequency, intensity and relax time. All these parameters are automatically changed during the program without operator intervention.(*)
- Creating and saving **automatic sequences** i.e. groups of programs in sequence.
- **Connection to an ultrasound machine** available (optional cable required).
- Large high quality **graphical monitor** for better screen visibility.
- Immediate availability of a selection of **"favorites"** programs user defined.

Still, with all these features, FIRING is **extremely easy and intuitive to operate**.

(*) See page 4 for additional information.


Contraction


Contraction of agonists/antagonists muscles


Combined stimulation with ultrasound

TECHNICAL DATA

Power supply:	115÷230 V~, 50-60 Hz
Power input:	45 VA
Weight:	3,8 Kg
Dimensions (LxWxH):	27 x 32.8 x 23 cm
Safety Class:	I type BF (CEI EN 60601-1, CEI EN 60601-2-10)

STANDARD ACCESSORIES

2 pcs. - Electrostimulation Cables [1]	(C/IS)
4 pcs. - Electrodes 60X40 mm [2]	(EL/1)
2 pcs. - Electrodes 60X60 mm [3]	(EL/2)
2 pcs. - Electrodes 60X120 mm [4]	(EL/3)
4 pcs. - Pads for EL/1 [5]	(S/1)
2 pcs. - Pads for EL/2 [6]	(S/2)
2 pcs. - Pads for EL/3 [7]	(S/3)
2 pcs. - Elastic straps 50 cm [8]	(F6)
2 pcs. - Elastic straps 100 cm [9]	(F7)
1 pc. - Black splitting cables [10]	(C/DU-N)
1 pc. - Red splitting cables [11]	(C/DU-R)
1 pc. - Power cable [12]	(C/A)

OPTIONAL ACCESSORIES

Ultrasound connection cable [13]	(C/U)
Black cable with 2 mm plug [14]	(C/RD-N)
Red cable with 2 mm plug [15]	(C/RD-R)
Point Electrode [16]	(M/SP-P)
Vaginal electrode [17]	(EV/1)
Vaginal electrode [18]	(EV/2)
Vaginal electrode [19]	(EV/3)
Vaginal electrode [20]	(EV/4)
Anal electrode [21]	(EL/A)
Evoline bag [22]	(A02.00241)
Evoline trolley [23]	(A01.00056)