

Elektronika i Elektromedycyna

MANUFACTURER

OF PHYSIOTHERAPY EQUIPMENT

Electrotherapy Magnetotherapy Laser therapy Ultrasound therapy CO₂ therapy

Serving you since 1986!

www.eie.com.pl

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EiE Poland - over 35 years together!

EXPERIENCE

Elektronika i Elektromedycyna (Electronics and Electromedicine) was founded in 1986 in Otwock near Warsaw. For more than 35 years we have put into action many thousands of physiotherapy devices of several generations. Our equipment is used extensively all over Poland as well as in many places worldwide.

INNOVATION

When creating our devices we use experience gained by our company, while keeping up with the times.

Our latest line of products has been uniquely designed. They come with original casings and full colour graphic touch panel screens.

Our products are easy to use – they are operated intuitively despite wide range of functions and parameters.

RELIABILITY

Our units are designed for continuous work – very often they work 2 shifts a day all year round. This is not a challenge for them. We support maintenance of the equipment for many years, some 15 or 20 years olds still doing fine whenever necessary.









Short comparison of devices

| Product | Electrotherapy | Laser Therapy | Ultrasound Therapy | Magneto- therapy | Simultaneous treatments | Display type |
|-------------------|----------------|-----------------------------------|------------------------|-------------------------|-------------------------|------------------------------------|
| Multitronic MT-8 | 2 channels | 1 channel | 1 channel | 1 channel | 2 | colour graphic touch panel 4.3" |
| Multitronic MT-6 | 2 channels | 1 channel | 1 channel | | 2 | colour graphic touch panel 4.3" |
| Multitronic MT-5 | 2 channels | | 1 channel | | 2 | colour graphic touch panel 4.3"" |
| Multitronic MT-4 | 2 channels | 1 channel | | | 2 | colour graphic touch panel 4.3" |
| Multitronic MT-4E | 2 channels | | | | 2 | colour graphic touch panel 4.3" |
| Solatronic SLE | 1 channel | 1 channel | 1 channel | | 2 | colour graphic touch panel 4.3" |
| Solatronic SL-3 | | 1 channel | 1 channel | | 2 | colour graphic touch panel 4.3" |
| Lasertronic LT-3 | | 2 channels + scanner option | | | 2 | colour graphic touch panel 4.3" |
| Sonotronic US-2 | | | 1 channel 2 sockets | | 1 | colour graphic touch panel 4.3" |
| Multitronic MT-3 | 2 channels | | | | 1 | text (9mm) |
| Magnetronic MF-24 | | 1 channel | | 2 channels 4 sockets | 5 | colour graphic touch panel 5.7" |
| Magnetronic MF-12 | | | | 1 channel 2 sockets | 2 | colour graphic touch panel 4.3" |
| Magnetronic MF-2 | | | F | 2 channels | 2 | colour graphic touch panel 4.3" |

Device colour:



standard green



optional (no extra charge) silver/gray



optional (extra charge)
from the RAL palette

Multitronic MT-8

Characteristics

- Modern device for two-channel electrotherapy, laser therapy, magnetotherapy and ultrasound stimulation
- Two simultaneous treatments option
- Colour touchscreen display (4.3")
- User-friendly touchscreen and button controls
- Ergonomic and lightweight probes
- Ready to use preset treatment programs for popular treatments
- Easy to store user-defined programs thanks to on-screen keyboard
- Independent adjustment of treatment settings
- Fan control feature to minimize noise and power consumption
- Treatment duration and number of performed treatments counter
- Can be used as portable for home treatments

Electrotherapy

- Wide range of 1- and 2-circuit electric currents
- CC and CV workmodes
- Microcurrent
- Combined therapy (with ultrasound)
- Waves of different types (electrogymnastics)
- Sequences of diadynamic currents
- Acoustic signalling of a break in the treatment circuit
- Electrode test
- Semi-automatic electrodiagnostics (I/t curve, calculation of coefficients)
- · Safe reaction to power supply break

Multitronic MT-8 provides the following treatments:

- Interferential: static (classic), dynamic, isoplanar, dipole vector,
 2-pole (premodulated) and interrupted
- Diadynamic (Bernard's): DF, MF, RS, MM, CP, LP, CPiso, LPiso (with adjusted sequence)
- Stimulation of flaccid paresis (medium frequency pulsed current with triangle, rectangle, trapezium, or sine modulation – both unipolar and bipolar)
- Stimulation of spastic paresis (tonolysis) in two-channel mode
- TENS: standard, asymmetric, alternating, including so called "irritating" modulation
- BURST TENS
- HVS (High Voltage Stimulation)
- Kotz / Russian stimulation
- Träbert modulation (UR) (2-5)
- Faradic, Neofaradic modulation
- Various wave modulations with wide range of adjustment for **electrical muscle stimulation**
- NMES (Neuromuscular Electrical Stimulation)
- FES (Functional Electrical Stimulation)
- IDC (Interrupted Direct Current)
- Ionophoresis
- DC (Galvanization)
- Microcurrent

General data

| Power supply | ~230V, 50Hz, 70VA |
|-----------------------------|-------------------|
| Electrical protection class | I, BF type |
| Dimensions | 335x270x125mm |
| Weight of control unit | 3.4 kg |

Electrotherapy technical data

| Interferential current | |
|---------------------------------------|------------|
| Current (RMS) | 0÷60mA |
| Interferential frequency | 1÷200Hz |
| Medium frequency pulsed current | |
| Amplitude | 0÷100mA |
| Pulse amplitude (tonolysis) | 0÷100mA |
| Pulse duration / width | 5÷990ms |
| Break duration | 100÷4000ms |
| Delay time (tonolysis) | 5÷150ms |
| Diadynamic current | |
| Mean current for DF | 0÷40mA |
| Mean current for MF | 0÷20mA |
| TENS, HVS | |
| Amplitude | 0÷100mA |
| Frequency | 1÷200Hz |
| Pulse duration | 50÷300µs |
| KOTZ / Russian stimulation | |
| Amplitude | 0÷100mA |
| TRÄBERT current / Ultra Reiz / 2-5 | |
| Amplitude | 0÷100mA |
| GALVANIC current | |
| Current | 0÷50mA |
| Waves / electrical muscle stimulation | on |
| Pulse duration | 0.5÷60s |
| Break duration | 1.0÷60s |
| Rise and fall time | 0÷100% |
| CV mode | |
| Voltage | 0÷100V |
| Voltage for TENS | 0÷140V |
| Microcurrents | |
| Amplitude | 0÷1000µA |
| | |

Laser Therapy

- Continuous and pulse mode
- Repeat dose feature
- Laser power sensor

| Laser class | 3B |
|-----------------|----------|
| Treatment timer | 1s÷99min |

Ultrasound Therapy

- · Continuous and pulse mode
- Double-frequency probes:
 1MHz and 3.3MHz in 5cm² or 1cm² size,
 automatic head 6x3cm²
- · Water-resistant ultrasound heads
- Sound and visual signals of ultrasound head contact with patient
- · Adjustment of patient contact sensitivity

| Ultrasound frequency | 1MHz or 3.3MHz |
|-----------------------|----------------------|
| Max. continuous power | 12.5W |
| Work mode | continuous or pulsed |
| Pulse frequency | 10÷150Hz |
| Pulse duty cycle | 5÷100% |
| Treatment timer | 30s÷30min |

Magnetotherapy

- Wide range of modulation frequency
- Specialized accessories: different shapes and sizes
- Treatment modulations: sine, rectangle, triangle (each unipolar and bipolar),

MX1 - change of shape with constant frequency, MX2 - change of shape with alternating frequency

| Frequency | 1÷150Hz |
|--|---------------------------|
| Magnetic field intensity change (depends on applicator type) | 0÷8mT |
| Workmode | continuous or interrupted |
| Treatment timer | 1÷99min |

Standard accessories

- operating manual
- set of electrodes, viscose pads, fixing bands, cables
- door warning labels

Optional accessories

- Selection of different types of electrodes and other electrotherapy accessories (see p. 13)
- Laser probes (see p. 17)
- Ultrasound heads (see p. 21-23)
- Magnetotherapy applicators (see p. 29)
- Laser protective eyewear
- Carrying bag for device and accessories
- Large stand for cluster laser probes

Optional applicators

Ultrasound applicators (see p. 21-23)

- SU-1: Surface 1.3cm² frequency 1MHz or 3.3MHz maximum continuous power density 2.5W/cm²
- SU-5: Surface 5cm² frequency 1MHz or 3.3MHz maximum continuous power density 2.5W/cm²
- SUP-6: Surface 6x3cm² frequency 1MHz or 3.3MHz maximum continuous power density 2.5W/cm²

Laser applicators (see p. 17)

- S-1N: single-diode, infrared (IR),
 50mW/905nm, high pulse power (50W)
- **S-2N:** single-diode, red (R), 40mW/660nm
- S-2B: single diode, red (R), 80mW/660nm
- S-3N: single-diode, infrared (IR), 400mW/808nm
- **SP-1B:** cluster, red (R), 720mw/660nm
- SP-2B: cluster, two-colour (R/IR), 1040mW/660nm+808nm
- SP-3: cluster, infrared (IR), 1440mW/808nm

Magnetic applicators (see p. 29)

- APE-1: flexible applicator
- AP-1: flat applicator (size of approx. A4)
- AP-2: flat applicator (size of approx. 2xA4)
- AS-204: reel applicator 200mm

Multitronic MT-6

Three therapies in one device

Characteristics

- Modern device for **two-channel electrotherapy**, laser therapy and ultrasound stimulation
- Two simultaneous treatments option
- Colour touchscreen display (4.3")
- User-friendly touchscreen and button controls
- Ergonomic and lightweight probes
- Ready to use preset treatment programs for popular treatments
- Easy to store user-defined programs thanks to on-screen keyboard
- Independent adjustment of treatment settings
- Fan control feature to minimize noise and power consumption
- Treatment duration and number of performed treatments counter
- Can be used as portable for home treatments

Electrotherapy

- Wide range of 1- and 2-circuit electric currents
- CC and CV workmodes and microcurrent
- Combined therapy (with ultrasound)
- Waves of different types (electrogymnastics)
- Sequences of diadynamic currents
- Acoustic signalling of a break in the treatment circuit
- Electrode test
- Semi-automatic electrodiagnostics (I/t curve, calculation of coefficients)
- Safe reaction to power supply break



| Power supply | ~230V, 50Hz, 70VA |
|-----------------------------|-------------------|
| Electrical protection class | I, BF type |
| Dimensions | 335x270x125mm |
| Weight of control unit | 3.4kg |

Electrotherapy technical data

Multitronic MT-6 provides the following electrotherapy treatments:

- Interferential: static (classic), dynamic, isoplanar, dipole vector, 2-pole (premodulated) and interrupted
- **Diadynamic** (Bernard's): DF, MF, RS, MM, CP, LP, CPiso, LPiso (with adjusted sequence)
- Stimulation of flaccid paresis (medium frequency pulsed current with triangle, rectangle, trapezium, or sine modulation – both unipolar and bipolar)
- Stimulation of spastic paresis (tonolysis) in two-channel mode
- **TENS:** standard, asymmetric, alternating, including so called "irritating" modulation
- BURST TENS
- HVS (High Voltage Stimulation)

- Kotz / Russian stimulation
- Träbert modulation (UR) (2-5)
- Faradic, Neofaradic modulation
- Various wave modulations with wide range of adjustment for electrical muscle stimulation
- NMES (Neuromuscular Electrical Stimulation)
- FES (Functional Electrical Stimulation)
- IDC (Interrupted Direct Current)
- DC (Galvanization)
- · Ionophoresis
- Microcurrent

Laser Therapy

| | 0 | | | | |
|---|-------|-------|-----|-------|------|
| • | Conti | nuous | ana | puise | mode |

- Repeat dose feature
- Laser power sensor

| Laser class | 3B |
|-----------------|----------|
| Treatment timer | 1s÷99min |

Ultrasound Therapy

- Continuous and pulse mode
- Double-frequency probes:
 1MHz and 3.3MHz in 5cm² or 1cm² size,
 automatic head 6x3cm²
- · Water-resistant ultrasound heads
- Sound and visual signals of ultrasound head contact with patient
- Adjustment of patient contact sensitivity

| Ultrasound frequency | 1MHz or 3.3MHz |
|-----------------------|----------------------|
| Max. continuous power | 12.5W |
| Work mode | continuous or pulsed |
| Pulse frequency | 10÷150 Hz |
| Pulse duty cycle | 5÷100% |
| Treatment timer | 30s÷30min |

Standard accessories

- operating manual
- set of electrodes, viscose pads, fixing bands, cables
- · door warning labels

Optional accessories

- Selection of different types of electrodes and other electrotherapy accessories (see p. 13)
- Laser probes (see p. 17)
- Ultrasound heads (see p. 21-23)
- Laser protective eyewear
- · Carrying bag for device and accessories
- Large stand for cluster laser probes

Optional applicators

Ultrasound applicators (see p.19-20)

- SU-1: Surface 1.3cm²
 frequency 1MHz or 3.3MHz
 maximum continuous power density 2.5W/cm²
- SU-5: Surface 5cm² frequency 1MHz or 3.3MHz maximum continuous power density 2.5W/cm²
- SUP-6: Surface 6x3cm² frequency 1MHz or 3.3MHz maximum continuous power density 2.5W/cm²

- Laser applicators (see p. 15)
 - **S-1N:** single-diode, infrared (IR), 50mW/905nm, high pulse power (50W)
- S-2N: single-diode, red (R), 40mW/660nm
- S-2B: single diode, red (R), 80mW/660nm
- S-3N: single-diode, infrared (IR), 400mW/808nm
- SP-1B: cluster, red (R), 720mw/660nm
- SP-2B: cluster, two-colour (R/IR), 1040mW/660nm+808nm
- SP-3: cluster, infrared (IR), 1440mW/808nm

Multitronic MT-5

Two therapies in one device

Characteristics

- Modern device for two-channel electrotherapy and ultrasound stimulation
- Two simultaneous treatments option
- Colour touchscreen display (4.3")
- User-friendly touchscreen and button controls
- Ergonomic and lightweight probes
- Ready to use preset treatment programs for popular treatments
- Easy to store user-defined programs thanks to on-screen keyboard
- Independent adjustment of treatment settings
- Fan control feature to minimize noise and power consumption
- Treatment duration and number of performed treatments counter
- Can be used as portable for home treatments

Electrotherapy

- Wide range of 1- and 2-circuit electric currents
- CC and CV workmodes and microcurrent
- Combined therapy (with ultrasound)
- Waves of different types (electrogymnastics)
- Sequences of diadynamic currents
- Acoustic signalling of a break in the treatment circuit
- Electrode test
- Semi-automatic electrodiagnostics
- (I/t curve, calculation of coefficients)
- Safe reaction to power supply break



General data

| Power supply | ~230V, 50Hz, 70VA |
|-----------------------------|-------------------|
| Electrical protection class | I, BF type |
| Dimensions | 335x270x125mm |
| Weight of control unit | 3.4 kg |

Electrotherapy technical data

| • • | |
|---------------------------------------|------------|
| Interferential current | |
| Current (RMS) | 0÷60mA |
| Interferential frequency | 1÷200Hz |
| Medium frequency pulsed current | |
| Amplitude | 0÷100mA |
| Pulse amplitude (tonolysis) | 0÷100mA |
| Pulse duration / width | 5÷990ms |
| Break duration | 100÷4000ms |
| Delay time (tonolysis) | 5÷150ms |
| Diadynamic current | |
| Mean current for DF | 0÷40mA |
| Mean current for MF | 0÷20mA |
| TENS, HVS | |
| Amplitude | 0÷100mA |
| Frequency | 1÷200Hz |
| Pulse duration | 50÷300µs |
| KOTZ / Russian stimulation | |
| Amplitude | 0÷100mA |
| TRÄBERT current / Ultra Reiz / 2-5 | |
| Amplitude | 0÷100mA |
| GALVANIC current | |
| Current | 0÷50mA |
| Waves / electrical muscle stimulation | |
| Pulse duration | 0.5÷60s |
| Break duration | 1.0÷60s |
| Rise and fall time | 0÷100% |
| CV mode | |
| Voltage | 0÷100V |
| Voltage for TENS | 0÷140V |
| Microcurrents | |
| Amplitude | 0÷1000μA |
| | |

Multitronic MT-5 provides the following electrotherapy treatments:

- Interferential: static (classic), dynamic, isoplanar, dipole vector, 2-pole (premodulated) and interrupted
- **Diadynamic** (Bernard's): DF, MF, RS, MM, CP, LP, CPiso, LPiso (with adjusted sequence)
- Stimulation of flaccid paresis (medium frequency pulsed current with triangle, rectangle, trapezium, or sine modulation both unipolar and bipolar)
- Stimulation of spastic paresis (tonolysis) in two-channel mode
- **TENS:** standard, asymmetric, alternating, including so called "irritating" modulation
- BURST TENS
- HVS (High Voltage Stimulation)

- Kotz / Russian stimulation
- Träbert modulation (UR) (2-5)
- Faradic, Neofaradic modulation
- Various wave modulations with wide range of adjustment for electrical muscle stimulation
- NMES (Neuromuscular Electrical Stimulation)
- FES (Functional Electrical Stimulation)
- IDC (Interrupted Direct Current)
- DC (Galvanization)
- Ionophoresis
- Microcurrent

Ultrasound Therapy

- · Continuous and pulse mode
- Double-frequency probes:
 1MHz and 3.3MHz in 5cm² or 1cm² size,
 automatic head 6x3cm²
- Water-resistant ultrasound heads
- Sound and visual signals of ultrasound head contact with patient
- · Adjustment of patient contact sensitivity

| Ultrasound frequency | 1MHz lub 3.3MHz |
|-----------------------|----------------------|
| Max. continuous power | 12.5W |
| Work mode | continuous or pulsed |
| Pulse frequency | 10÷150Hz |
| Pulse duty cycle | 5÷100% |
| Treatment timer | 30s÷30min |

Standard accessories

- operating manual
- set of electrodes, viscose pads, fixing bands, cables

Optional accessories

- Selection of different types of electrodes and other electrotherapy accessories (see p. 13)
- Ultrasound heads (see p. 21-23)
- · Carrying bag for device and accessories

Optional applicators

Ultrasound applicators

- SU-1: Surface 1.3cm²
 frequency 1MHz or 3.3MHz
 maximum continuous power density 2.5W/cm²
- SU-5: Surface 5cm² frequency 1MHz or 3.3MHz maximum continuous power density 2.5W/cm²
- SUP-6: Surface 6x3cm² frequency 1MHz or 3.3MHz maximum continuous power density 2.5W/cm²

Multitronic MT-4

Two therapies in one device

Characteristics

- Modern device for **two-channel electrotherapy** and laser therapy
- Two simultaneous treatments option
- Colour touchscreen display (4.3")
- User-friendly touchscreen and button controls
- Ergonomic and lightweight probes
- Ready to use preset treatment programs for popular treatments
- Easy to store user-defined programs thanks to on-screen keyboard
- Independent adjustment of treatment settings
- Fan control feature to minimize noise and power consumption
- Treatment duration and number of performed treatments counter
- Can be used as portable for home treatments

Electrotherapy

- Wide range of 1- and 2-circuit electric currents
- CC and CV workmodes and microcurrent
- Waves of different types (electrogymnastics)
- Sequences of diadynamic currents
- · Acoustic signalling of a break in the treatment circuit
- Electrode test
- Semi-automatic electrodiagnostics (I/t curve, calculation of coefficients)
- Safe reaction to power supply break



General data

| Power supply | ~230V, 50Hz, 70VA |
|-----------------------------|-------------------|
| Electrical protection class | I, BF type |
| Dimensions | 335x270x125mm |
| Weight of control unit | 3.1 kg |

Electrotherapy technical data

| zioon on ioi up y tooi in iou i uutu | |
|---------------------------------------|------------|
| Interferential current | |
| Current (RMS) | 0÷60mA |
| Interferential frequency | 1÷200Hz |
| Medium frequency pulsed current | |
| Amplitude | 0÷100mA |
| Pulse amplitude (tonolysis) | 0÷100mA |
| Pulse duration / width | 5÷990ms |
| Break duration | 100÷4000ms |
| Delay time (tonolysis) | 5÷150ms |
| Diadynamic current | |
| Mean current for DF | 0÷40mA |
| Mean current for MF | 0÷20mA |
| TENS, HVS | |
| Amplitude | 0÷100mA |
| Frequency | 1÷200Hz |
| Pulse duration | 50÷300μs |
| KOTZ / Russian stimulation | |
| Amplitude | 0÷100mA |
| TRÄBERT current / Ultra Reiz / 2-5 | |
| Amplitude | 0÷100mA |
| GALVANIC current | |
| Current | 0÷50mA |
| Waves / electrical muscle stimulation | |
| Pulse duration | 0.5÷60s |
| Break duration | 1.0÷60s |
| Rise and fall time | 0÷100% |
| CV mode | |
| Voltage | 0÷100V |
| Voltage for TENS | 0÷140V |
| Microcurrents | |
| Amplitude | 0÷1000μA |
| | |

Multitronic MT-4 provides the following electrotheapy treatments:

- Interferential: static (classic), dynamic, isoplanar, dipole vector, 2-pole (premodulated) and interrupted
- **Diadynamic** (Bernard's): DF, MF, RS, MM, CP, LP, CPiso, LPiso (with adjusted sequence)
- Stimulation of flaccid paresis (medium frequency pulsed current with triangle, rectangle, trapezium, or sine modulation – both unipolar and bipolar)
- Stimulation of spastic paresis (tonolysis) in two-channel mode
- TENS: standard, asymmetric, alternating, including so called "irritating" modulation
- BURST TENS
- HVS (High Voltage Stimulation)

- Kotz / Russian stimulation
- Träbert modulation (UR) (2-5)
- Faradic, Neofaradic modulation
- Various wave modulations with wide range of adjustment for electrical muscle stimulation
- NMES (Neuromuscular Electrical Stimulation)
- FES (Functional Electrical Stimulation)
- IDC (Interrupted Direct Current)
- DC (Galvanization)
- Ionophoresis
- Microcurrent

Laser Therapy

- · Continuous and pulse mode
- Repeat dose feature
- Laser power sensor

| Laser class | 3B |
|-----------------|----------|
| Treatment timer | ls÷99min |

Standard accessories

- · operating manual
- set of electrodes, viscose pads, fixing bands, cables
- door warning labels

Optional accessories

- Selection of different types of electrodes and other electrotherapy accessories (see p. 13)
- Laser probes (see p. 17)
- Laser protective eyewear
- Carrying bag for device and accessories
- · Large stand for cluster laser probes

Optional applicators

Laser applicators (see p. 17)

- S-1N: single-diode, infrared (IR), 50mW/905nm, high pulse power (50W)
- **S-2N:** single-diode, red (R), 40mW/660nm
- S-2B: single diode, red (R), 80mW/660nm

- S-3N: single-diode, infrared (IR), 400mW/808nm
- SP-1B: cluster, red (R), 720mw/660nm
- SP-2B: cluster, two-colour (R/IR), 1040mW/660nm+808nm
- SP-3: cluster, infrared (IR), 1440mW/808nm



Carrying bags

Most of our devices are portable and can be used at patient's home. We recommend using our carrying bag for comfortable and safe transportation of the device and accessories.

Multitronic MT-3

Characteristics

- Modern design available in a range of colours
- Ready to use preset treatment programs for popular treatments
- · User-defined programs
- Independent adjustment of treatment settings
- Adjustable diadynamic sequences
- Two treatment circuits with independent amplitude setting
- Semi-automatic electrodiagnostics (graphic presentation of I/t curve, automatic calculation of coefficients), stores last test record
- · Large LCD screen with easy to read data
- Safe reaction to power supply break
- Detection of a break in the treatment circuits
- Treatment duration and number of performed treatments counter
- Can be used as portable for home treatments

Multitronic MT-3 provides the following treatments:

- Interferential: static (classic), dynamic, isoplanar, dipole vector, 2-pole (premodulated) and interrupted
- **Diadynamic** (Bernard's): DF, MF, RS, MM, CP, LP, CPiso, LPiso (with adjusted sequence)
- Stimulation of flaccid paresis (medium frequency pulsed current with triangle, rectangle, trapezium, or sine modulation – both unipolar and bipolar)
- Stimulation of spastic paresis (tonolysis) in two-channel mode
- TENS: standard, asymmetric, alternating, including so called "irritating" modulation
- BURST TENS
- HVS (High Voltage Stimulation)
- Kotz / Russian stimulation
- Träbert modulation (UR) (2-5)
- Faradic, Neofaradic modulation
- Various wave modulations with wide range of adjustment for electrical muscle stimulation
- NMES (Neuromuscular Electrical Stimulation)
- FES (Functional Electrical Stimulation)
- IDC (Interrupted Direct Current)
- DC (Galvanization)
- · lonophoresis
- Microcurrent



General data

| Power supply | ~230V, 50Hz, 70VA |
|-----------------------------|-------------------|
| Electrical protection class | II, BF type |
| Dimensions | 335x270x125mm |
| Weight of control unit | 3.0kg |

Electrotherapy technical data

| Interferential current | |
|---------------------------------------|------------|
| Current (RMS) | 0÷60mA |
| Interferential frequency | 1÷200Hz |
| Medium frequency pulsed current | |
| Amplitude | 0÷100mA |
| Pulse amplitude (tonolysis) | 0÷100mA |
| Pulse duration / width | 5÷990ms |
| Break duration | 100÷4000ms |
| Delay time (tonolysis) | 5÷150ms |
| Diadynamic current | |
| Mean current for DF | 0÷30mA |
| Mean current for MF | 0÷15mA |
| TENS, HVS | |
| Amplitude | 0÷100mA |
| Frequency | 1÷200Hz |
| Pulse duration | 50÷250μs |
| KOTZ / Russian stimulation | |
| Amplitude | 0÷100mA |
| TRÄBERT current / Ultra Reiz / 2-5 | |
| Amplitude | 0÷100mA |
| GALVANIC current | |
| Current | 0÷50mA |
| Waves / electrical muscle stimulation | |
| Pulse duration | 0.5÷8.0s |
| Break duration | 1.0÷16.0s |
| Rise and fall time | 0÷100% |
| | |

Standard accessories

- operating manual
- · set of electrodes, viscose pads, fixing bands, cables

Optional accessories

- Selection of different types of electrodes and other electrotherapy accessories (see p. 13)
- Carrying bag for device and accessories

Examples of electrotherapy accesories

Full offer is available on our website www.eie.com.pl



Solatronic SLE

Three therapies in one device

Characteristics

- Modern device for electrotherapy, ultrasound and laser therapy
- Two simultaneous treatments option
- Colour touchscreen display (4.3")
- User-friendly touchscreen and button controls
- Ergonomic and lightweight probes
- Convenient probe holder by the control unit
- Ready to use preset treatment programs for popular treatments
- Easy to store user-defined programs thanks to on-screen keyboard
- Independent adjustment of treatment settings
- Fan control feature to minimize noise and power consumption
- Treatment duration and number of performed treatments counter
- Can be used as portable for home treatments

Electrotherapy

- Setting of different waveforms for electrical muscle stimulation (EMS)
- Setting of sequence of diadynamic current
- Combined therapy (with ultrasound)
- User-friendly semi-automatic electrodiagnostics (graphic presentation of I/t curve, automatic calculation of coefficients), stores last test records
- Safe reaction to power supply break
- Acoustic signalling of a break in the treatment circuits



General data

| Power supply | ~230V 10%, 50 Hz, 70VA |
|-----------------------------|------------------------|
| Electrical protection class | I, BF type |
| Dimensions | 335 x 270 x 125mm |
| Weight of control unit | 3.5 kg |

Electrotherapy technical data

| Interferential current (premodulated) | |
|---------------------------------------|----------|
| Current (RMS) | 0÷60mA |
| Interferential frequency | 1÷200Hz |
| Medium frequency pulsed current | |
| Amplitude | 0÷100mA |
| Diadynamic current | |
| Mean current for DF | 0÷40mA |
| Mean current for MF | 0÷20mA |
| TENS, HVS | |
| Amplitude | 0÷100mA |
| Frequency | 1÷200Hz |
| Impulse duration | 50÷300μs |
| KOTZ / Russian stimulation | |
| Amplitude | 0÷100mA |
| TRÄBERT current / Ultra Reiz 2-5 | |
| Amplitude | 0÷100mA |
| GALVANIC current | |
| Current | 0÷50mA |
| Waveform / electrical muscle | |
| stimulation | |
| Impulse duration | 0.5÷60s |
| Break duration | 1.0÷60s |
| Rise and fall time | 0÷100% |
| | |

Laser Therapy

- Impulse and continuous operation
- Dose repetition function
- Laser power measurement sensor

| Laser class | 3B |
|-----------------------------|----------|
| Duration of laser treatment | 1s÷99min |

Ultrasound Therapy

- Continuous and pulse mode
- Double-frequency probes:
 1MHz and 3.3MHz in 5cm² or 1cm² size,
 automatic head with the surface of 6x3cm²
- Water-resistant ultrasound heads
- Sound and visual signals of ultrasound head contact with patient
- Adjustment of touch sensitivity of head

| Ultrasound frequency | 1MHz or 3.3MHz |
|-----------------------|----------------------|
| Max. continuous power | 12.5W |
| Work mode | continuous or pulsed |
| Pulse frequency | 10÷150Hz |
| Pulse duty cycle | 5÷100% |
| Treatment timer | 30s÷30min |

Standard accessories

- operating manual
- set of electrodes, viscose pads, fixing bands, cables
- · door warning labels

Optional accessories

- Various electrodes and accessories for electrotherapy (see p. 13)
- Ultrasound heads (see p. 21-23)
 - SU-1: Surface of 1.3cm² frequency 1MHz or 3.3MHz
 - **SU-5:** Surface of 5cm² frequency 1MHz or 3.3MHz
 - $\hbox{\bf SUP-6:}$ Surface of $6x3cm^2$ frequency 1MHz or 3.3MHz
- Laser probes (see p. 17)
 - Single-diode: **S-1N, S-2N, S-2B, S-3N**
 - Cluster: SP-1B, SP-2B, SP-3
- Laser protective eyewear
- Carrying bag for device and accessories





Lasertronic LT-3

Laser biostimulator

Characteristics

- Large (4.3"), colour touchscreen display
- User-friendly touchscreen and button controls
- Ergonomic and lightweight probes
- Modern design of control unit and probes
- · Convenient probe holder by the control unit
- Ready to use preset treatment programs for popular treatments
- Easy to store user-defined programs thanks to on-screen keyboard
- Independent adjustment of treatment settings
- Repeat dose feature
- Laser power sensor
- Fan control feature to minimize noise and power consumption
- Treatment duration and number of performed treatments counter
- Can be used as portable for home treatments
- 2 year warranty (including probes)

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General data

| Power supply | ~230V 10%, 50 Hz, 50VA |
|-----------------------------|------------------------|
| Electrical protection class | I, B type |
| Dimensions | 335 x 270 x 125mm |
| Weight of control unit | 2.5kg |

Laser Therapy

| Laser safety class | 3B |
|-----------------------------|----------|
| Duration of laser treatment | 1s÷99min |

Standard accessories

- operating manual
- door warning labels

Optional accessories

- Laser probes (see p.17)
 - Single-diode: **S-1N, S-2N, S-2B, S-3N**
 - Cluster: SP-1B, SP-2B, SP-3
 - Scanner **SK-1** (see p.18)
- Laser protective eyewear
- · Carrying bag for device and accessories
- Large stand for cluster laser probes

Probes for laser therapy devices



Easy to use, lightweight and elegant laser probes.

Single diode probes

| Probe type | S-1N | S-2N | S-2B | S-3N | |
|------------------------|------------|----------|-----------|------------|-----|
| Light wavelength | 905nm / IR | 660nm/R | 660nm/R | 808nm / IR | |
| Pulse power | 50W | 40mW | 80mW | 400mW | |
| Mean power | 50mW | 40mW | 80mW | 400mW | |
| Power adjustment range | (1÷50)mW | (1÷40)mW | (1÷80) mW | (1÷400)mW | |
| Frequency | 5÷5000Hz | 5÷9999Hz | 5÷9999Hz | 5÷9999Hz | |
| Single pulse energy | 10µJ | - | - | - | 101 |
| Pulse width | 200ns | - | | _ | ı |







Cluster probes

| Light wavelength 660nm 660nm 808nm 808nm Number of diodes 9/R 5/R 4/IR 9/IR Single diode power 80mW 80mW 160mW 160mW Total continuous power 720mW 1040mW 1440mW Output power (10÷720)mW (10÷1040)mW (10÷1440)mW | | | | | |
|---|------------------------|------------|---------|-------|-------------|
| Number of diodes 9/R 5/R 4/IR 9/IR Single diode power 80mW 80mW 160mW Total continuous power 720mW 1040mW 1440mW Output power (10÷720)mW (10÷1040)mW (10÷1440)mW Frequency range 5÷9999Hz 5÷9999Hz 5÷9999Hz | Probe type | SP-1B | SP- | -2B | SP-3 |
| Single diode power 80mW 80mW 160mW 160mW Total continuous power 720mW 1040mW 1440mW Output power (10÷720)mW (10÷1040)mW (10÷1440)mW Frequency range 5÷9999Hz 5÷9999Hz 5÷9999Hz | Light wavelength | 660nm | 660nm | 808nm | 808nm |
| Total continuous power 720mW 1040mW 1440mW Output power (10÷720)mW (10÷1040)mW (10÷1440)mW Frequency range 5÷9999Hz 5÷9999Hz 5÷9999Hz | Number of diodes | 9/R | 5/R | 4/IR | 9/IR |
| Output power (10÷720)mW (10÷1040)mW (10÷1440)mW Frequency range 5÷9999Hz 5÷9999Hz 5÷9999Hz | Single diode power | 80mW | 80mW | 160mW | 160mW |
| Frequency range 5÷9999Hz 5÷9999Hz 5÷9999Hz | Total continuous power | 720mW | 1040 | mW | 1440mW |
| , | Output power | (10÷720)mW | (10÷104 | 10)mW | (10÷1440)mW |
| Treatment area 50cm² 50cm² 50cm² | Frequency range | 5÷9999Hz | 5÷99 | 99Hz | 5÷9999Hz |
| | Treatment area | 50cm² | 500 | cm² | 50cm² |

Cluster probes are designed for treatment of larger areas.

Cluster probes are equipped with a small stand for convenience.

Optional big holder for cluster probes

Laser scanner SK-1

Therapy of larger areas

SK-1 is intended to work with Lasertronic LT-3 biostimulator

Characteristics

- Modern laser scanner
- Infrared laser IR 808nm / 400mW (output power)
- Red laser R 660nm / 80mW (output power)
- Reduction of energy loss due to reflections results in increased effective treatment dose
- Uniform exposure of the entire treatment area (reduction of overexposures)
- Applicator controlled only by Lasetronic LT-3 device

Treatment area shapes

- Uniform rectangular surface
- Uniform elliptical surface
- Uniform line scanning
- Curves within rectangle boundaries
- Custom shape (User defined)

Features

- Automatic distance measurement and calculation of treatment area
- Automatic stabilization of treatment area
- Smooth adjustment of head position with automatic stabilization
- Quick setting of treatment area with dial knobs
- Wide range of treatment area shapes to choose from
- Custom treatment area shape
- Mobile stand for scanner with device shelf



Specifications

| Total output power | 480mW |
|---|--------------------|
| IR source | 808nm / 400mW |
| R source | 660nm / 80mW |
| Arm adjustment range | 60cm to 140cm |
| Treatment area (measured at 50cm above the patient) | 400cm ² |
| Automatic distance measurement | 5-100cm |
| Exposure uniformity deviation (in uniform shapes) | ±10% |

Solatronic SL-3

Two therapies in one device

Characteristics

- Modern ultrasound and laser therapy device
- Two simultaneous treatments option
- Colour touchscreen display (4.3")
- User-friendly touchscreen and button controls
- Ergonomic and lightweight probes
- · Convenient probe holder by the control unit
- Modern design of control unit and probes
- Ready to use preset treatment programs for popular treatments
- Easy to store user-defined programs thanks to on-screen keyboard
- · Independent adjustment of treatment settings
- Fan control feature to minimize noise and power consumption
- Treatment duration and number of performed treatments counter
- Can be used as portable for home treatments



General data

| Power supply | ~230V 10%, 50Hz, 70VA |
|-----------------------------|-----------------------|
| Electrical protection class | I, B type |
| Dimensions | 335 x 270 x 125mm |
| Weight of control unit | 2.5kg |

Laser Therapy specifications

- Impulse and continuous operation
- Dose repetition function
- Laser power measurement sensor

| Laser safety class | 3B |
|-----------------------------|----------|
| Duration of laser treatment | 1s÷99min |

Ultrasound Therapy

- Continuous and pulse mode
- Double-frequency probes:
 1MHz and 3.3MHz in 5cm² or 1cm² size,
 automatic head with the surface of 6x3cm²
- Water-resistant ultrasound heads
- Sound and visual signals of ultrasound head contact with patient
- · Adjustment of touch sensitivity of head

| Ultrasound frequency | 1MHz or 3.3MHz |
|-----------------------|----------------------|
| Max. continuous power | 12.5W |
| Work mode | continuous or pulsed |
| Pulse frequency | 10÷150Hz |
| Pulse duty cycle | 5÷100% |
| Treatment timer | 30s÷30min |

Standard accessories

- therapy gel for ultrasound therapy
- · operating manual
- door warning labels

Optional accessories

- Ultrasound heads (see p. 21-23)
 - SU-5: Surface of 5cm² frequency 1MHz or 3.3MHz
 - SU-1: Surface of 1.3cm² frequency 1MHz or 3.3MHz
 - SUP-6: Surface of 6x3cm² frequency 1MHz or 3.3MHz
- Laser probes (see p. 17)
 - Single-diode: S-1N, S-2N, S-2B, S-3N
 - Cluster: SP-1B, SP-2B, SP-3
- Laser protective eyewear
- · Carrying bag for device and accessories
- Large stand for cluster laser probes

Sonotronic US-2

Modern ultrasound therapy device

Characteristics

- Colour touchscreen display (4.3")
- User-friendly touchscreen and button controls
- Double-frequency probes:
 1MHz and 3.3MHz in 5cm² or 1cm² size,
 automatic head with the surface of 6x3cm²
- Continuous and pulse mode
- Ergonomic and lightweight heads
- · Convenient head holder by the control unit
- · Water-resistant ultrasound heads
- Adjustment of patient contact sensivity
- Sound and visual signals of contact of the ultrasound head with patient
- Ready to use preset treatment programs for popular treatments
- Easy to store user-defined programs thanks to on-screen keyboard
- Independent adjustment of treatment settings
- Fan control feature to minimize noise and power consumption
- Treatment duration and number of performed treatments counter
- Can be used as portable for home treatments



General data

| Duration of treatment | 30s÷30min |
|-----------------------------|------------------------|
| Power supply | ~230V 10%, 50 Hz, 70VA |
| Electrical protection class | I, B type |
| Dimensions | 335 x 270 x 125mm |
| Weight of control unit | 2.5kg |

Ultrasound Therapy

| Ultrasound frequency | 1MHz or 3.3MHz |
|-----------------------|----------------------|
| Max. continuous power | 12.5W |
| Impulse frequency | 10÷150Hz |
| Work mode | continuous or pulsed |
| Pulse duty cycle | 5÷100% |

Standard accessories

- therapy gel for ultrasound therapy
- · operating manual

Optional accessories

- Ultrasound heads (see p. 21-23)
 - SU-1: Surface of 1.3cm² frequency 1MHz or 3.3MHz
 - SU-5: Surface of 5cm² frequency 1MHz or 3.3MHz
 - SUP-6: Surface of 6x3cm² frequency 1MHz or 3.3MHz
- Carrying bag for device and accessories
- Holder of treatment head for water treatments

Ultrasound heads







Technical specifications of ultrasound heads

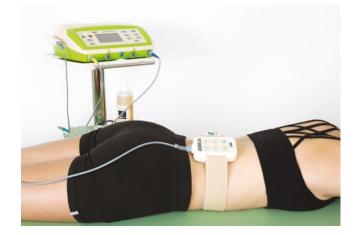
| Ultrasound head | SU-1 | SU-5 | SUP-6 |
|------------------------------|----------------|----------------|------------------------|
| Active area | 1.3cm² | 5cm² | 6 x 3cm² |
| Ultrasound frequency | 1MHz or 3.3MHz | 1MHz or 3.3MHz | 1MHz or 3.3MHz |
| Max. continous power density | 2.5W / cm² | 2.5W / cm² | 2.5W / cm² |
| Peak pulse power density | 3.0W / cm² | 3.0W / cm² | 2.5W / cm ² |

SUP-6

Automatic ultrasonic head







Characteristics of the SUP-6 ultrasonic head

- automatic treatment area sweep
- treatment area 6 x 3cm² (18cm² in total)
- double frequency head: 1MHz, 3.3MHz (and alternating 1 / 3.3MHz)

- convenient attachment of the head to the patient with velcro strap
- increasing the therapist's comfort of work
- optimal use of the treatment time



Magnetronic MF-24

Multichannel magnetotherapy and laser therapy device

Features

- 5 simultaneous treatments!
- The device features an innovative control system

 each applicator has an independent treatment timer.

 As a result, Magnetronic MF-24 can perform 4 simultaneous independently initiated magnetotherapy treatments

 (2 treatments per channel) and 1 laser therapy treatment.
 In total Magnetronic MF-24 features 5 treatment timers.
- 2 independent magnetotherapy channels with separate adjustments
- Each channel can connect 2 applicators
- Independent laser therapy channel for treatments with a laser probe.

User-friendly

- Ready to use preset treatment programs for popular treatments
- User-defined programs can be stored by the therapist.
- Independent adjustment of all treatment settings.
- Large (5.7"), colour touch screen display.
- Equipped with touch screen and button controls.

Extra features

- Wide magnetic field frequency range: 1Hz÷100Hz
- MX1 and MX2 programmes with automatic modulation change
- Lightweight
- Wide range of laser power adjustment up to 1440mW
- · Auto detection of connected applicator type



General data

| Magnetic field frequency range | 1÷100Hz |
|--------------------------------|--|
| Magnetic field intensity | 0÷20mT (depends on applicator used) |
| Pulse / break duration | 0.5÷8s |
| Power supply | 230V/50Hz/400VA |
| Electrical protection class | I, B type |
| Dimensions | 6.2kg |
| Weight of control unit | 364 x 335 x 142mm |

Magnetic field modulations

- sine, rectangle and triangle, each of them unipolar and bipolar
- MXI consecutive shape change at constant frequency
- MX2 consecutive shape change at variable frequency

Accessories

 Optional: (see p.26-27) various size reel applicators, flat applicators, patient couch or lift for large applicator, applicator and unit trolleys, laser probes, laser protective eyewear.

Available laser probes

(see p.17)

- single-diode S-1N, S-2N, S-2B, S-3N
- cluster SP-1B, SP-2B, SP-3

Magnetronic MF-12

Modern magnetotherapy device

MAGNETRONIC ME-12 TOOL 50 FINE MISSON 1500 44 The state of the stat

Features

- 2 independent treatments. The device features
 an innovative control system each applicator has
 an independent treatment timer and can be independently
 initiated. As a result, Magnetronic MF-12 can perform
 2 independent magnetotherapy treatments with the same
 treatment settings.
- Connections for two applicators

User-friendly

- Ready to use preset treatment programs for popular treatments
- User-defined programs can be stored by the therapist.
- Independent adjustment of all treatment settings.
- Colour touch screen display (4.3")
- Equipped with touch screen and button controls.

Extra features

- Wide magnetic field frequency range (1Hz÷100Hz)
- MX1 and MX2 programmes with automatic modulation change
- Auto detection of connected applicator type
- Lightweight

General data

| Magnetic field frequency range | 1÷100Hz |
|--------------------------------|--|
| Magnetic field intensity | 0÷20mT (depends on applicator used) |
| Pulse / break duration | 0.5÷8s |
| Power supply | 230V/50Hz/200VA |
| Electrical protection class | I, B type |
| Dimensions | 4.4kg |
| Weight of control unit | 335 x 270 x 125mm |

Magnetic field modulations

- sine, rectangle and triangle, each of them unipolar and bipolar
- MXI consecutive shape change at constant frequency
- MX2 consecutive shape change at variable frequency

Accessories

 Optional (see p.26-27): various size reel applicators, flat applicators, patient couch or lift for large applicator, applicator and unit trolleys.

Accessories for Magnetotherapy







Double applicator APP-100



Flat applicator AP-2D (size: 44x70cm)



Flat applicator AP-1D (size: 32x44cm)

Magnetronic MF-2

Portable Magnetotherapy

Characteristic

- Modern device for two-channel electrotherapy
- 2 independent magnetotherapy channels with separate treatment settings
- Colour touch screen display (4.3")
- User-friendly touchscreen and button controls
- Ready to use preset treatment programs for popular treatments
- User-defined programs can be stored by the therapist
- Independent adjustment of treatment settings
- Fan control feature to minimize noise and power consumption
- Treatment duration and number of performed treatments counter
- Can be used as portable for home treatments
- Wide magnetic field frequency range (1Hz-150 Hz)
- Choice of applicators including various size flat applicators
- Magnetic field shapes: sine, rectangle and triangle, each of them unipolar or bipolar,
 - MXI consecutive shape change at constant frequency, or
 - MX2 consecutive shape change at variable frequency

AS-204 reel applicator

Provides easy treatment of limbs and is much lighter than other available reel applicators.



General data

| Power supply | ~230V 10%, 50Hz, 70VA |
|-----------------------------|-----------------------|
| Electrical protection class | I, B type |
| Dimensions | 335 x 270 x 125mm |
| Weight of control unit | 2.5kg |

Magnetotherapy technical data

| Magnetic field frequency range | 1–150 Hz |
|--------------------------------|-------------------------------------|
| Magnetic field intensity | 0÷8 mT (depends on applicator used) |
| Pulse / break duration | 0.5÷8s |
| Work mode | continuous or interrupted |
| Treatment timer | 1÷99min |

Standard accessories

Operating manual

Optional accessories

- Magnetotherapy specialized applicators (see p. 29)
- Carrying bag for device and accessories

Accessories for portable magnetotherapy

Accessories for Magnetronic MF-2, Multitronic MT-8



Flat applicator AP-2 (size: 44x70cm)



Flat applicator AP-1 (size: 32x44cm)



Reel applicator AS-204 (size: 20cm diameter)



Flexible applicator APE-1 (size: 17x25cm)

CARBObed

Device for dry CO₂ baths, a carbonic acid bath therapy

Advantages of dry CO₂ baths compared to water baths

- Patient can stay in his/her clothes
- Significantly lower gas usage
- Shorter preparation time (no need to fill in and empty the bath tub)
- Easy to install (no need to provide water supply or sewage disposal system)
- More effective therapy in selected ailments



- Automated treatment procedure
- · Quick and effective sealing of the treatment chamber
- Automatic carbon dioxide refill and circulation
- High and stable gas concentration on the treated body part
- Automatic carbon dioxide moisturizing and heating increases treatment effectiveness immediately from the beginning
- Adjustable treatment temperature 30÷40°C
- Sound signal at the end of treatment
- Controlled carbon dioxide disposal after treatment
- Carbon dioxide consumption: maximum 18I/min (practical efficiency: ca. 70 treatments with 26kg gas cylinder)
- Mobile construction
- Adjustable backrest angle
- Dimensions (length x width x height) 2150 x 700 x 980mm
- Couch height: 590mm
- Power supply 230V / 50Hz / 800W





Equipment trolleys

We offer a series of modern equipment trolleys to suit our equipment. They are good-looking, easy to clean, ergonomic, equipped with large, comfortable wheels and brakes making them easy to manoeuvre.



Magnetotherapy applicator trolleys

Our solid built applicator trolleys help patients keep the body parts in the applicator during treatment. Each trolley is equipped with a comfortable support to place the patient's limb. With our applicator trolleys, you can use heavy applicators easy and comfortably.

Equipment trolleys

We offer single- and double-shelf trolleys.

Single-shelf trolleys have one, top shelf with a comfortable handle to manoeuvre it and to place the therapy cables.

Double-shelf trolleys can be used to operate two devices. The lower shelf can be mounted at an adjustable height and angle, allowing for treatment of two patients with the same trolley or simply making the access to the device more comfortable. Shelves have specially shaped edges to prevent the equipment from being accidentally knocked off.





