

Electrotherapy, ultrasound therapy and combined therapy

Etius U

Etius U – is a modern and ergonomic unit intended to use in electrotherapy, ultrasound therapy, combined therapy and electrophonophoresis. Also the unit may be applied in electrodiagnostics of nervous-muscle system.

The unit is distinguished by the fact that possesses two completely independent treatment channels. Thanks to this solution it is possible to perform simultaneous treatments with different parameters on one or two patients.

Basic area of its functionality is electrotherapy, in which the unit provide the availability of all typical and commonly used currents. Additionally, the Etius U offers completely new possibilities: application of microcurrents, unipolar sine surge and specially designed TENS currents used in spastic paralysis therapy.

Thanks to the application of modern technical solutions, the Etius U unit enables to perform the combined therapy treatments without the necessity of connecting an external electrostimulator or the ultrasound therapy unit.

SPECIFICATION

ELECTROTHERAPY-CURRENTS

- interferential (isoplanar, dynamic, static, one-channel AMF)
- TENS (symmetric, asymmetric, alternating, Burst)
- TENS to spastic paralysis therapy
- Kotz' – Russian stimulation
- tonolysis
- diadynamic (MF,DF,CP,CP-ISO, LP)
- Trabert pulse, Leduc', faradic
- pulse – rectangular, triangular
- unipolar sine surge
- galvanic
- microcurrents

ELECTRODIAGNOSTICS

- electrodiagnostics with graphic presentation of I/t curve
- automatic calculation of rheobase, chronaxie as well as threshold, coefficient and quotient of accommodation

ULTRASOUND THERAPY (optional)

- 1 MHz, 1 cm² ultrasound head
- 1 MHz, 4 cm² ultrasound head
- continuous emission – thermal effect
- pulse emission – micro-massage
- ultrasound heads provided with contact control connected to treatment timer
- stabilization of output power



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ELECTROPHONOPHORESIS (optional)

- 1 MHz, 4 cm² electrophonophoresis head
- available currents: unipolar sine surge, pulse, diadynamic, galvanic
- electrophonophoresis head provided with contact control connected to treatment timer
- current flow monitoring
- focus of the influence of electric field and ultrasound wave in the area of medicine absorption
- deep penetration – up to 10 cm under the skin
- high concentration of medicine in treated area
- acceleration of the medicine's effect influenced by ultrasound wave

MANUAL MODE

Complete control for advanced users

TREATMENT PROGRAMS

- simplification of the unit operation
- treatment programs chosen by name
- 207 preset treatment programs
- 110 user-defined programs
- 80 favourite programs
- naming individual user programs

TREATMENT SEQUENCES

- simplification of the unit operation
- 30 preset treatment sequences



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Technical specification

ERGONOMICS

- two independent treatment channels
- operation mode: program/manual
- easy-to-read display
- operation in graphic mode
- preset treatment programs base
- treatment programs chosen by name
- treatment timer
- electrodes test
- statistics – the number of performed treatments
- buzzer volume setting
- precise control over the ultrasound wave emission during performed treatment
- head sensitivity calibration
- temporal loss of contact does not interrupt treatment procedure e.g. bone area

STRUCTURE

- graphic LCD display
- heavy-duty and reliable keyboard
- modern design
- operation in CC (stabilized output current) and CV (stabilized output voltage) modes
- complete galvanic isolation between channel in each mode
- generation of unidirectional (unipolar) currents in interrupted mode
- self-test – systematic control of the unit

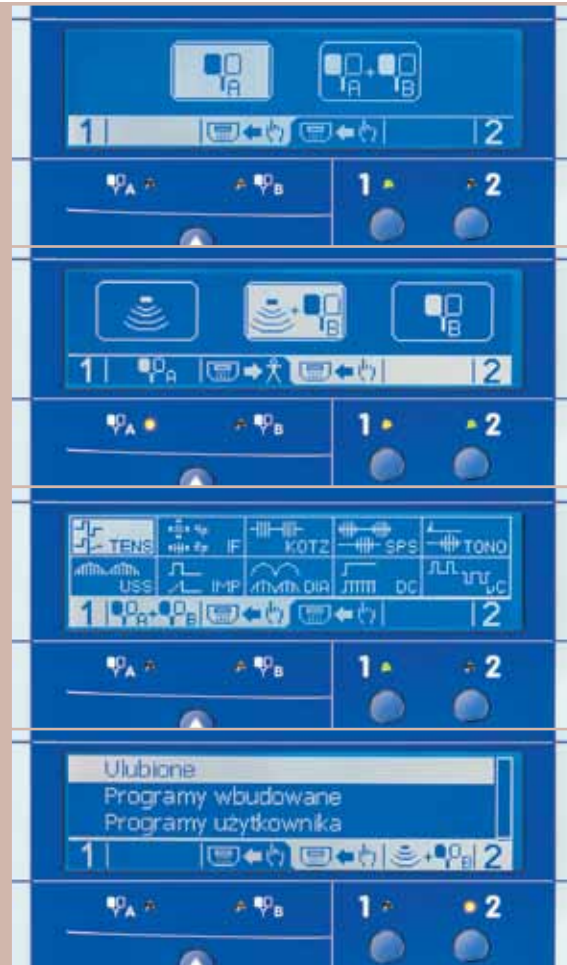
TECHNICAL SPECIFICATIONS

controller – maximum constant current in patient's circuit (CC mode)

galvanic	40mA
diadynamic, pulse	60mA
interferencial, Kotz', unipolar sine surge	100mA
TENS	140mA
tonolysis	100mA
microcurrents	1000uA
maximum voltage in patient's circuit (CV mode)	140V
max. ultrasound wave intensity	3 W/cm ²
pulse frequency	16Hz, 48Hz, 100Hz
duty cycle for pulse mode	10%,25%, 50%, 75%
mains supply	230V, 50Hz, 50W, 70VA
weight	6 kg

WARRANTY

Etius	2 years
ultrasound head	2 years
electrophonophoresis head	2 years



Etius U

Technical specification

STANDARD ACCESSORIES

- mains cable
- patient lead (2 pcs.)
- electrotherapy electrode 6x6 cm (4 pcs.); 7,5x9cm (2 pcs.)
- viscose electrode cover 6x6 cm (8 pcs.); 7,5x9cm (4 pcs.)
- velcro fixing belt 40x10 cm (2pcs.); 100x10 cm (2 pcs.)
- 1 MHz, 4 cm² ultrasound head with holder
- spare fuse T1 AL250V (2 pcs.)
- user guide

OPTIONAL ACCESSORIES

- disposable self-adhesive electrodes 3x4 cm;
5,5x5,5cm; 5,5x12,5 cm
- point electrodes 5mm, 10mm, 15mm, 20mm,
- crocodile clip
- sand-filled bag 21x14cm, 21x28cm
- bag for the unit and accessories
- Elf, Elf X trolleys
- gel 0,5 l (1 pc.)
- 1 MHz, 1 cm² ultrasound head with holder
- 1 MHz, 4 cm² electrophonophoresis head with holder
- patient's switch

