



BTL-4000

SMART & PREMIUM





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BTL-4000 SMART

BTL-4000 PREMIUM

THE MOST ADVANCED

TECHNOLOGY IN THE INDUSTRY

Based on over 20 years of experience in design and manufacture of products for physiotherapy, BTL has designed the brand new series of ultrasound, electrotherapy and laser modalities: the BTL-4000 Smart and Premium. During their development, all of the efforts focused on designing the most technologically advanced system for physiotherapy; the system that would be comfortable to use, easy to operate, while featuring the best parameters available today.

The brand new BTL-4000 operator independent ultrasound technology is the first of its kind and presents a technological breakthrough: this revolutionary advancement is made possible due to the proprietary Rotary Field Technology.

The electrotherapy module features the widest range of the most advanced waveforms available today. The laser therapy system offers the most effective treatment for pain management and other selected conditions, using the most advanced and the most powerful probes in the industry.

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ONE-TOUCH START WITH QUICK THERAPY PROTOCOLS





THE NEW BTL-4000 SERIES

This new and advanced series of physiotherapy products offers devices for ultrasound therapy, electrotherapy and laser therapy. The outstanding parameters and wide range of applicators, including the revolutionary HandsFree Sono™ make this line an ideal choice for any professional practice.

The BTL-4000 Series is available in two models:
the **BTL-4000 SMART** and the **BTL-4000 PREMIUM**.

EASY OPERATION

- Therapy can be started with one touch using the QUICK screen
- Possibility to select up to eight QUICK protocols for each therapy
- Large colour touch screen provides clear visualization of all important information
- Display available in two sizes: 7" for the **BTL-4000 Premium** or 4.3" for the **BTL-4000 Smart**



FULL RANGE OF APPLICATORS AND ACCESSORIES

- Time-saving HandsFree Sono™ applicator
- Ergonomically designed, heated ultrasound heads
- Wide spectrum of laser probes and cluster probes for wide range of treatments
- New vacuum unit with changeable vacuum intensity
- Well-designed durable trolley for everyday use

DATABASE

- Easy management of the patient database
- All patient relevant information can be stored in the device memory
- Easy recall of patients' records and related treatments

PORTABILITY

- Easy manipulation
- Lightweight battery-operated devices

THERAPEUTICAL PROTOCOLS

- Wide library of preset protocols for easy and effective application
- Classification of the protocols according to the biological effects
- Full-colour encyclopaedia with anatomical images
- Description of therapies and positioning of applicators for treatment protocols

NAVIGATION THROUGH BODY PARTS

- Body Parts navigation for fast access to localized protocols
- Clearly arranged Body Parts in ten groups





SAVE YOUR TIME WITH THE NEW **HANDSFREE SONO™**

The new operator independent **HandsFree Sono™** is a stationary applicator with built-in Rotary Field Technology.

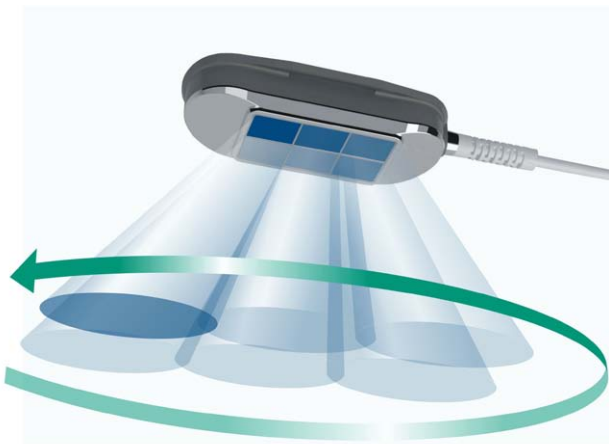
The technology makes ultrasound therapy more comfortable for the patient, while saving an operator's valuable time and energy.



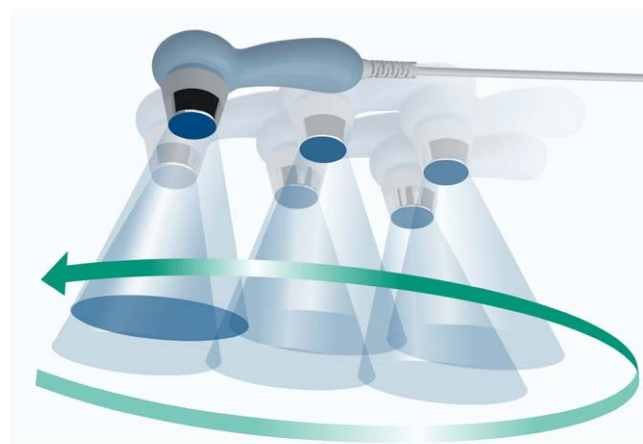
HANDSFREE SONO™

THE ONLY OPERATOR INDEPENDENT APPLICATOR WITH ROTARY FIELD

The BTL HandsFree Sono™ brings the unique Rotary Field Technology. It is the first ultrasound applicator in the market which creates electronically precise rotating ultrasound field without necessity of a therapist activity. This outstanding technology enables very fast, effective and comfortable treatment and reduces operator fatigue.



automatic application by the HandsFree Sono



hand operated application by a therapist

ROTARY FIELD TECHNOLOGY: THE PRINCIPLE

The ultrasound Rotary Field Technology is the latest innovation based on multiple crystal applicators. The ultrasound crystals are organized in the applicator as an array of ultrasound transmitters which are controlled by a real time processor unit. The real time processor unit activates the individual crystals according to preset parameters.

The Rotating Field is created by a sequential activating of crystals while the real time processor controls speed of rotation, output power and depth of ultrasound field penetration for each individual crystal. Such a precise control makes the ultrasound therapy effective and safe against any risks such as hotspots which are typical of some stationary ultrasound technologies.

MAXIMUM FLEXIBILITY FOR ALL TREATMENT POSITIONS



ULTRASOUND

A BREAKTHROUGH IN THE ULTRASOUND THERAPY

This operator independent ultrasound system saves the operator's time, while making ultrasound treatment more effective than ever before. An easy operation, the most advanced parameters and a wide library of protocols make the BTL-4000 Smart and the BTL-4000 Premium the most advanced system in the industry.



BTL-4000 PREMIUM

- HandsFree Sono applicator*
- QUICK protocols
- Body Parts navigation
- Simultaneous treatment with 1 and 3 MHz
- Large 7" colour touch screen
- Preset protocols and therapeutic encyclopaedia
- Patient database
- Heated ultrasound heads
- Portable and battery-operated*

*optional



BTL-4000 SMART

- HandsFree Sono™ applicator*
- Simultaneous treatment with 1 and 3 MHz
- 4.3" colour touch screen
- Preset protocols and therapeutic encyclopaedia
- Heated ultrasound heads
- Portable and battery-operated*

FEATURES & BENEFITS OF THE BTL-4000 ULTRASOUND

- Saving an operator time and effort with HandsFree Sono™
- Maximum safety using the embedded Rotary Field Technology
- Optimal and equal ultrasound dosage of selected area with HandsFree Sono
- Two models of HandsFree Sono: 18 cm² with six crystals and 12 cm² with four crystals
- Alternating frequencies 1 and 3 MHz
- Ergonomic heads with visual accessories' identification / visual patient contact indicator
- Heated multi-frequency applicators: 1 and 3 MHz available

TECHNICAL SPECIFICATIONS OF THE BTL-4000 ULTRASOUND

Model	BTL-4710 SMART	BTL-4710 PREMIUM
Part number	P2710.401	P2710.701
Display	4.3"	7"
Knob		•
QUICK protocols		•
Body Part navigation		•
Patient database		•
Number of independent channels	1	1
Number of heads simultaneously connected	2	2
Modular frequency	10-150 Hz	10-150 Hz
Duty factor	5-95 %	5-95 %
Max. intensity in continuous	2 W / cm ²	2 W / cm ²
Max. intensity in pulse mode	3 W / cm ²	3 W / cm ²
Dimension	380 × 190 × 260 mm	
Weight	Max. 3 kg	
Mains supply	100-240 AC, 50-60 Hz	
Standard accessories	Ultrasound head 5 cm ² , gel 300 ml, adapter, manual	

Optional accessories

Ultrasound head 1 cm² — P2700.001 | Ultrasound head 5 cm² — P2700.002 | HandsFree Sono 4 — P2700.003 | HandsFree Sono 6 — P2700.004
Holder for gel — P2000.002 | Ultrasound gel 0.3 l — P007.010 | Ultrasound gel 1 l — P007.011

ELECTROTHERAPY

THE MOST COMPREHENSIVE
RANGE OF THERAPY
OPTIONS



TECHNICAL SPECIFICATIONS OF THE BTL - 4000 ELECTROTHERAPY

MODEL	BTL-4620 SMART	BTL-4625 SMART	BTL-4620 PREMIUM	BTL-4625 PREMIUM
Part number	P2620.401	P2625.402	P2620.701	P2625.701
Display	4.3"	4.3"	7"	7"
Knob			•	•
QUICK protocols			•	•
Body Part navigation			•	•
Patient database			•	•
Electrotherapy channels	2	2	2	2
Electrodiagnostics	•	•	•	•
Galvanic	•	•	•	•
Diadynamic currents	•	•	•	•
Träbert	•	•	•	•
Faradic	•	•	•	•
Neofaradic	•	•	•	•
Exponential pulses	•	•	•	•
Exponential pulses with rise	•	•	•	•
Rectangular pulses	•	•	•	•
Russian stimulation	•	•	•	•
Stimulation pulses	•	•	•	•
Trapezoid pulses	•	•	•	•
Triangular pulses	•	•	•	•
Combined pulses	•	•	•	•
TENS	•	•	•	•
NPHV	•	•	•	•
Sequences	•	•	•	•
Transcranial electrotherapy	•	•	•	•
2-pole interference	•	•	•	•
4-pole interference	•	•	•	•
Isoplanar and vector field		•		•
Interrupted pulses		•		•
Leduc current		•		•
H-wave		•		•
Microcurrent		•		•
Mid-frequency surges		•		•
Spastic stimulation - Hufschmidt		•		•
Spastic stimulation - Jantsch		•		•
HVT		•		•
IG pulses		•		•
Modulated pulsed current		•		•
VMS current		•		•
Kotz current		•		•
EPIR		•		•
Dimension	380 × 190 × 260 mm			
Weight	Max. 3 kg			
Mains supply	100-240 VAC, 50-60 Hz			
Standard Accessories	2× electrode connection cable - light grey and dark grey, 4× flat rubber electrode 5×7 cm, sponge covers, set of fixation straps, adapter, manual			

ELECTROTHERAPY

FULL RANGE OF WAVEFORMS FOR THE BEST THERAPEUTIC EFFECT

The BTL-4000 Smart and the BTL-4000 Premium feature two channel electrotherapy units with a wide selection of waveforms. The new BTL-4000 series offers a fast therapy option using the QUICK screen, an easy navigation according to the body parts treated, all of them being clearly visible on the device large colour touch screen.

Optional accessories for BTL-4000 SMART / PREMIUM



BTL-4000 PREMIUM

- QUICK protocols
- Body Parts navigation
- Large 7" colour touch screen
- Preset protocols and therapeutic encyclopaedia
- Patient database
- Portable and battery-operated*

*optional



BTL-4000 SMART

- 4.3" colour touch screen
- Preset protocols and therapeutic encyclopaedia
- Portable and battery-operated*

*optional

FEATURES & BENEFITS OF THE BTL-4000 ELECTROTHERAPY

- The largest range of waveforms available in the industry
- Protocols organized by the required therapy effect
- Programmable sequences
- High Voltage therapy
- Constant Current and Constant Voltage modes
- Electro-diagnostics: I/t curve, motor point, accommodation coefficient, rheobase and chronaxie
- Trolley*
- Connection to the vacuum unit*

*optional

Optional accessories

Part number P5600.007	Electrode 7 × 5 cm – 2 mm input, 1 pc.
Part number P5600.008	Electrode 12 × 8 cm – 2 mm input, 1 pc.
Part number P006.014	Sponge cover for electrodes 7 × 5 cm, 1 pc.
Part number P006.016	Sponge cover for electrodes 12 × 8 cm, 1 pc.
Part number P2600.002	Electrode connection cable for electrotherapy BTL-4000 Smart/Premium, for channel 1, light grey
Part number P2600.003	Electrode connection cable for electrotherapy BTL-4000 Smart/Premium, for channel 2, dark grey
Part number P5600.024	Set of fixation straps for electrodes, 4 pairs (1 pair long, 1 pair middle sized, 2 pairs short)
Part number P5600.010	Bipolar vaginal electrode
Part number P5600.011	Bipolar rectal electrode
Part number P5600.013	Holder for ball-point electrode for BTL-4000/5000
Part number P5600.014	Ball-point attachment for BTL-4000/5000 – 2 mm in diameter
Part number P5600.015	Ball-point attachment for BTL-4000/5000 – 6 mm in diameter

LASER THERAPY

THE MOST EFFECTIVE APPLICATORS FOR PAIN MANAGEMENT AND REGENERATION

WIDE RANGE OF APPLICATORS

BTL offers a wide range of infrared and red probes for laser therapy. Infrared probes penetrate deeper into the tissue while red are used to treat superficial areas such as wounds, scars or haematoma. All infrared probes have embedded pilot beams that navigate on the treatment area during the therapy.

LASER PROBES

For small treatment areas, select an applicator with up to 400 mW in power.



Probe	Technical parameters	Part number
Red probe – divergent	685 nm / 30 mW	L458.211
Red probe – divergent	685 nm / 50 mW	L458.212
Infrared probe – convergent	830 nm / 50 mW, green navigation	L458.201
Infrared probe – convergent	830 nm / 100 mW, green navigation	L458.202
Infrared probe – convergent	830 nm / 200 mW, green navigation	L458.203
Infrared probe – convergent	830 nm / 300 mW, green navigation	L458.204
Infrared probe – convergent	830 nm / 400 mW, green navigation	L458.205

LASER CLUSTER PROBES

For larger areas, select an applicator with a treatment area of up to 50 cm², and power of up to 1,500 mW.



Cluster probe	Technical parameters	Part number
Red cluster	685 nm / 200 mW total output	L455.201
Infrared cluster	830 nm / 800 mW total output, blue navigation	L455.202
Infrared cluster	830 nm / 1300 mW total output, blue navigation	L455.203
Combined cluster	685 & 830 nm / 1000 mW total output, blue navigation	L455.204
Combined cluster	685 & 830 nm / 1500 mW total output, blue navigation	L455.205



LASER THERAPY

ERGONOMICS DESIGNED FOR EVERYDAY USE

Both the BTL-4000 Smart and the BTL-4000 Premium Lasers have a wide spectrum of powerful applicators with three types of wavelengths and adjustable intensity levels. The laser modules can address most biological effects required from low level laser therapy, while reaching maximum treatment efficacy. The large database of preset protocols makes the use of the laser device easy and comfortable for advanced practitioners as well as those new to the laser therapy.

Optional accessories for BTL-4000 SMART / PREMIUM



BTL-4000 PREMIUM

- QUICK protocols
- Navigation through Body Parts
- Large 7" colour touch screen
- Preset protocols and therapeutic encyclopaedia
- Patient database
- Portable and battery-operated*

*optional



BTL-4000 SMART

- 4.3" colour touch screen
- Preset protocols and therapeutic encyclopaedia
- Portable and battery-operated*

FEATURES & BENEFITS OF THE BTL-4000 LASER

- Two outputs for simultaneous connection of laser applicators
- Wide range of red, infrared and combined probes
- Continuous and pulse therapy options
- Automatic recalculation of therapy parameters
- Laser acupuncture and Nogier's frequencies
- Trolley*

*optional

TECHNICAL SPECIFICATIONS OF THE BTL-4000 LASER

Model	BTL-4110 SMART	BTL-4110 PREMIUM
Part number	P2110.401	P2110.701
Display	4.3"	7"
Knob		•
QUICK protocols		•
Body Parts navigation		•
Patient database		•
Number of probes simultaneously connected	2	2
Modes operation	Continuous and pulse	Continuous and pulse
Dosage	Fine 0.1-99.0 J / cm ²	Fine 0.1-99.0 J / cm ²
Frequency	0-10000 Hz	0-10000 Hz
Therapy area	0.1-50 cm ²	0.1-50 cm ²
Duty factor	10-90 %	10-90 %
Laser class	3B	3B
Dimension	380 × 190 × 260 mm	
Weight	Max. 3 kg	
Mains supply	100-240 AC, 50-60 Hz	
Standard accessories	Holder for laser probe, adapter, manual	

Optional accessories

Part number P5100.008	Safety eyewear, protection level L3 or higher, plastic
Part number L449.005	Holder for optical attachment
Part number L449.006	Optical attachment for dentistry
Part number L449.007	Optical attachment for ENT
Part number L449.008	Optical attachment for gynaecology

THREE THERAPIES IN A SINGLE UNIT



ELECTROTHERAPY ULTRASOUND LASER



COMBINED UNITS

ELECTROTHERAPY

ULTRASOUND

LASER

BTL-4000 PREMIUM

- Three therapies in a single unit
- HandsFree Sono™ applicator*
- QUICK protocols
- Navigation through Body Parts
- Large 7" colour touch screen
- Preset protocols and therapeutic encyclopaedia
- Patient database
- Portable and battery-operated*

FEATURES & BENEFITS OF THE BTL-4000 COMBINED UNITS

- Two independent electrotherapy channel
- Wide spectrum of waveforms
- Vacuum unit*
- Large selection of laser therapy applicators*

*optional



Optional accessories for BTL-4000 PREMIUM



MODEL	Electrotherapy	Ultrasound	Laser	Extended waveforms	Part number
BTL-4820SL PREMIUM	•	•	•		P2820.781
BTL-4825SL PREMIUM	•	•	•	•	P2825.781

COMBINED UNITS

ELECTROTHERAPY

ULTRASOUND

BTL-4000 PREMIUM

- HandsFree Sono™ applicator*
- QUICK protocols
- Body Parts navigation
- Large 7" colour touch screen
- Preset protocols and therapeutic encyclopaedia
- Patient database

BTL-4000 SMART

- HandsFree Sono™ applicator*
- 4.3" colour touch screen
- Preset protocols and therapeutic encyclopaedia

FEATURES & BENEFITS OF THE BTL-4000 COMBINED UNITS

- Two independent channel electrotherapy
- Wide spectrum of waveforms
- Vacuum unit*
- Portable and battery-operated*

*optional



Optional accessories for BTL-4000 SMART / PREMIUM



MODEL	Electrotherapy	Ultrasound	Extended waveforms	Part number
BTL-4820S SMART	•	•		P2820.471
BTL-4825S SMART	•	•	•	P2825.471
BTL-4820S PREMIUM	•	•		P2820.771
BTL-4825S PREMIUM	•	•	•	P2825.771

COMBINED UNITS

ELECTROTHERAPY LASER

BTL-4000 SMART

- HandsFree Sono™ applicator*
- 4.3" colour touch screen
- Preset protocols and therapeutic encyclopaedia
- Portable and battery-operated*

FEATURES & BENEFITS OF THE COMBINED UNITS

- Two independent electrotherapy channel
- Wide spectrum of waveforms available
- Vacuum unit*
- Broad range of laser therapy applicators*

*optional



Optional accessories for BTL-4000 SMART



MODEL	Electrotherapy	Laser therapy	Extended waveforms	Part number
BTL-4820L SMART	•	•		P2820.481
BTL-4825L SMART	•	•	•	P2825.481

THE NEW BTL-VAC II VACUUM UNIT AND TROLLEY

Combine the new BTL-Vac II unit with the BTL-4000 Smart or BTL-4000 Premium to apply electrotherapy current by means of suction-cup electrodes.

FEATURES & BENEFITS OF THE VACUUM UNIT

- Vacuum unit integrated with trolley
- Two independent outputs
- Continuous and pulse mode
- Seven levels of vacuum intensity
- Four pulse modes and one continuous mode

TECHNICAL SPECIFICATIONS OF THE TROLLEY

Part number	P2000.001
Dimension	960 × 620 × 570 mm
Weight	11,9 kg
Number of drawers	6

TECHNICAL SPECIFICATIONS OF THE VACUUM UNIT

Part number	PVAC.200
Number of outputs	2
Mode	Continuous and pulse
Pulse frequency	5, 10, 15, 20 pulses / minute
Vacuum intensity	7
Dimension	250 × 130 × 209 mm
Weight	1,9 kg
Mains supply	100-240 VAC, 50-60 Hz
Standard Accessories	4× interface cable for electrotherapy, 2× electrode connection cable, sponges, 2× vacuum electrode connection cable, 4× vacuum electrode 60 mm, adapter

Optional accessories

Part number P2000.001	Plastic trolley for BTL-4000 Smart / Premium, BTL-5000 Series	Part number PVAC.203	Vacuum electrode connection cable for BTL-Vac II, for channel 2, dark grey
Part number PVAC.053	Vacuum electrode 30 mm	Part number PVAC.206	Adapter for BTL-Vac II
Part number P012.006	Vacuum electrode 60 mm	Part number PVAC.204	Cable for interconnection of BTL-4000 Smart/Premium electrotherapy units to BTL-Vac II, 2 pcs.
Part number P012.005	Vacuum electrode 90 mm		
Part number PVAC.052	Sponge for vacuum electrode 30 mm	Part number PVAC.205	Cable for interconnection of BTL-5000 electrotherapy units to BTL-Vac II, 2 pcs.
Part number P012.008	Sponge for vacuum electrode 60 mm		
Part number P012.007	Sponge for vacuum electrode 90 mm		
Part number PVAC.202	Vacuum electrode connection cable for BTL-Vac II, for channel 1, light grey		



