

# PHYSIOTHERAPY





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## **BTL-5000**

**THE BTL-5000 SERIES OFFERS ADVANCED AND WELL DESIGNED PHYSIOTHERAPY UNITS FOR PROFESSIONAL USE. COMBINING OUTSTANDING FUNCTIONAL DESIGN, MOST COMPREHENSIVE SELECTION OF TREATMENT PARAMETERS AND EXCEPTIONAL PERFORMANCE, AT AN AFFORDABLE PRICE, THE BTL-5000 SERIES OFFERS THE MOST ADVANCED PHYSIOTHERAPY UNITS AVAILABLE.**





### THE BTL UNIQUE MODULAR SYSTEM

**Electrotherapy + Ultrasound therapy + Laser + Magnetotherapy**

The BTL-5000 physiotherapy series is tailored to fit all your current and future therapy needs. Thanks to its modularity, the BTL-5000 unit can be supplied exactly to your practice needs – a precise fit for your therapy needs and current budget requirements. Most important, units may be upgraded to new levels of performance when needed.

#### The BTL Unique Modular System offers:

- ◇ Combination of up to four therapies in a single unit: Electrotherapy + Ultrasound therapy + Laser therapy + Magnetotherapy
- ◇ The most complete selection of treatment parameters available
- ◇ Cost savings on the initial investment, plus time and space savings in the office
- ◇ Optional upgrade for new applications
- ◇ Patient convenience since all therapies are applied at a single location



BTL-5000 Combi



### TOUCH SCREEN

The touch-controlled display with pen pointer considerably simplifies the use of the unit. The control module is configured vertically allowing the operator to easily view information on the screen from different positions. In addition, display brightness may be adjusted to suit different office lighting conditions. The information displayed on the screen will guide the operator through the entire therapy. Simply adjust the parameters by pressing the touch screen buttons and turn the main knob to set the intensity.



### LARGE GRAPHIC DISPLAY

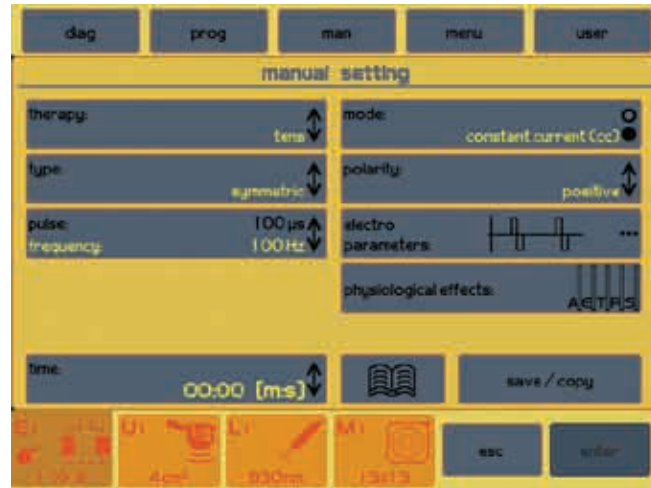
The large graphic display clearly shows therapy parameters. Even the most advanced therapy currents and therapy methods are displayed together with therapy effects and treatment strategies.

**TWO TYPES OF TOUCH SCREEN DISPLAY**

The BTL-5000 units are supplied in two display screen sizes:

5.7" colour touch screen

8.4" colour TFT touch screen



**PRE-PROGRAMMED PROTOCOLS**



Save time by using the pre-programming feature. Based on detailed research and practical use of the units, the well-organised pre-programmed therapy protocols offer recommendations for treating various conditions and provide a guide to the selected therapy. Simply choose a diagnosis from the list of alphabetically organised protocols or selecting a programme to initiate treatment.

**BTL THERAPEUTIC ENCYCLOPAEDIA**



A full colour, therapeutic encyclopaedia with therapy descriptions, built-in diagnoses, therapy procedures, and anatomical images and positioning of therapy applicators. For more information see pages 8–9.

**USER-DEFINED PROTOCOLS**



The large memory capacity allows storage of 150 (500) user-defined therapy protocols. Data from the last 20 treatments can be recalled at any time.



### PATIENT DATABASE

Add patient names and other relevant information to the unit's internal memory and connect patient data with pre-programmed or your own protocols. When patients return, simply recall their name and apply the pre-set therapy.



### IDENTIFICATION OF ACCESSORIES AND ACCESSORIES MAINTENANCE CHECK

If several accessories are attached to the unit at the same time, individual accessories are automatically recognized for a specific treatment. Select a treatment on the display (electrotherapy, ultrasound, laser, or magnetotherapy) and the control light on the corresponding accessory (electrotherapy cable, ultrasound head or magnetotherapy applicator) will indicate that the accessory is active and should be used. Accessories may be tested at any time to check for functionality and condition. Applicators and cables are also checked to ensure perfect working condition.



### COLOUR FRAME OPTION

Select a colour of the unit that suits best your office design and personal taste. The BTL-5000 series offers 4 main colour options for the front panel screen surround: dark blue, light blue, yellow and orange.



### UNIT ADJUSTMENTS

Sound and volume adjustment, display colour and brightness setting, screen saver, auto switch-off, initial security code and many other features can be adjusted as desired.



### MULTILINGUAL UNIT

The BTL-5000 units can be set to operate in different languages (English, French, Spanish, Russian, German, Portuguese).



### OUTPUTS

Up to 6 outputs are available on the BTL-5000 units.

#### General technical specifications of the BTL-5000 series

Mains supply	230 V/50–60 Hz, 115V/50–60 Hz
Dimensions	230 × 390 × 260 mm
Weight (less accessories)	4.7–5.3 kg
Class according to MDD 93/42/EEC	IIb
Equipment protection class	II (according to IEC 536)



## BTL THERAPEUTIC ENCYCLOPAEDIA

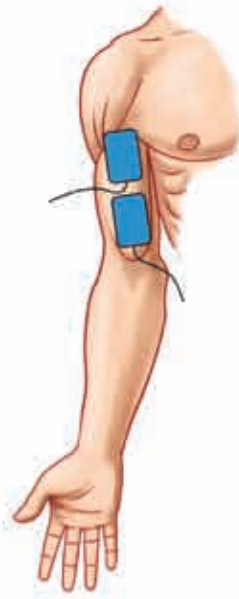
Based on many years of medical research, the Encyclopaedia feature offers on-screen assistance with most aspects of therapy. With this feature, users can easily apply an extensive database of knowledge of physical therapy techniques to their own practice. See descriptions of all therapies, built-in diagnoses, therapy procedures, and anatomical images with positioning of therapy applicators. Every pre-programmed protocol can be linked directly to its description in the Encyclopaedia.

## EXAMPLES FROM THE ENCYCLOPAEDIA

### ELECTROTHERAPY

#### MYALGIA

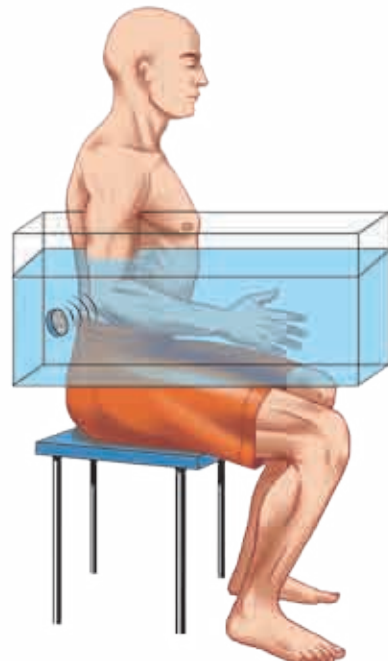
<b>Programme:</b>	E-1663
<b>Therapy parameters:</b>	
current:	TENS
type:	symmetric
pulse:	100us
pulse frequency:	100Hz
modulation:	trapezoid surges
<b>Position of electrodes:</b>	electrodes 4x6cm above the affected muscle
<b>Treatment time:</b>	10-20min, step 1min
<b>Frequency of treatments:</b>	every other day
<b>Number of treatments:</b>	8
<b>Intensity:</b>	up to threshold motor level
<b>Effects:</b>	analgesic, vasodilatation



### ULTRASOUND

#### ARTHRITIS RHEUMATOIDES – SUBAQUALIS

<b>Programme:</b>	U-0002 arthritis rheumatoides - subaqualis
<b>Therapy parameters*</b>	
carrier frequency:	1MHz
duty factor:	1:2 (50%)
modulation frequency:	100Hz
<b>Recommended applicators:</b>	ultrasound head, 5 cm <sup>2</sup>
<b>Length of application:</b>	5 minutes
<b>Frequency of treatments:</b>	2 - 3x per week
<b>Number of treatments:</b>	6 - 10
<b>Intensity:</b>	1.0 - 2.0 W/cm <sup>2</sup> , step 0.1 W/cm <sup>2</sup>
<b>Effects:</b>	analgesic, antiedematous, myorelaxation
<b>Note:</b> Subaqual application. Distance of the ultrasound head from the affected area: 10 - 12cm. Water temperature: 36°C.	





**LASER**

**SACRALGIA**

**Programme:** L-0812  
programme: L-0812 sacralgia

**Therapy parameters\***

**dosage:** 16 J/cm<sup>2</sup>

**power:** by probe

**irradiated area:** 1 cm<sup>2</sup>

**frequency:** 10 Hz

**duty factor (DF):** 80 %

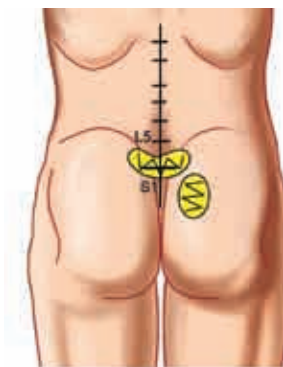
**Recommended accessories:** infrared laser probe

**Frequency of treatments:** 3x per week

**Number of treatments:** 12 or until problems subside

**Effects:** analgesic, vasodilatation, myorelaxation

**Note:** Irradiate lumbo-sacral trocheal joints, from upper to lower spine, and the same contralaterally to the sacro-iliac joint.



**MAGNETOTHERAPY**

**FRACTURE – OSTEOSYNTHESIS**

**Programme:** M-0042 osteosynthesis – per saltum post operation

**Therapy parameters\***

**current:** continuous magnetic field

**intensity of mag. field:** according to applicator

**Recommended applicators:** solenoid 30, disc

**Length of application:** 60 min

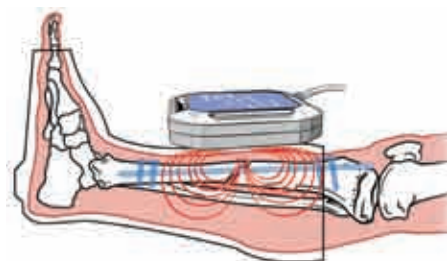
**Frequency of treatments:** daily

**Number of treatments:** 15 – 20

**Position of applicator:** suitable applicator directly at the operated area

**Effects:** antiedematous, analgesic, vasodilatation, antiphlogistic, support of healing

**Note:** For in-patients apply 2x a day. The effectiveness of therapy can be increased by application of SMF at the first five therapies. The patient is relieved of pain, visible rtg changes appear after a longer time. Along with magnetotherapy it is recommended to administer preparations to support metabolism of bone tissue.



**SPASM**

**Programme:** M-0054

**Therapy parameters:**

**current:** series of magnetic pulses

**intensity of mag. field:** 120mT/10

**shape of pulses:** rectangular (protracted) pulses

**Recommended applicators:** solenoid 30cm, solenoid 60cm, double disk

**Treatment time:** 30min

**Frequency of treatments:** daily

**Number of treatments:** long-term treatment 10-14 weeks - according to pain relief

**Position of applicators:** solenoid 30cm, 60cm, double disk - for local spasms of limb muscles, in the area of discomfort

**Effects:** analgesic, myorelaxation, improvement of microcirculation



## THE ELECTROTHERAPY BTL-5000 PULS

The BTL-5000 Puls are the most sophisticated electrotherapy devices available on the market. The units generate a full range of low and medium frequency waveforms and their modifications, and are equipped with all features and options that reflect the latest in electrotherapy.

The BTL-5000 Puls series comes in several configurations, offering a number of outputs and waveform types:

- BTL-5620 Puls – 2-channel electrotherapy, an advanced electrotherapy unit with 2 outputs for simultaneous treatment of two patients and for application of 4-pole interference
- BTL-5625 Puls – 2-channel electrotherapy, similar in performance to the BTL-5620, the BTL-5625 features, in addition, electrodiagnostics and an extended number of waveforms
- BTL-5640 Puls – 4-channel electrotherapy for simultaneous treatment of 2 patients and for simultaneous application of 4-pole interference on 2 patients
- BTL-5645 Puls – 4-channel electrotherapy, similar in its performance to the BTL-5640, features, in addition, electrodiagnostics and an extended number of waveforms

### Features and benefits of the BTL-5000 Electrotherapy Unit

- ◇ Full range of low and medium frequency waveforms and their modifications (see page 12)
- ◇ +/- Easy change of electrode polarity
- ◇ Constant Current and Constant Voltage modes – CC/CV
- ◇ Programmable sequences
- ◇ Electrodiagnostics: I/t curves, motoric point, rheobasis and chronaxie, accommodation coefficient
- ◇ Test of quality of electrodes and patient cables
- ◇ BTL Unique Modular System™ – later upgrades possible
- ◇ Combination with ultrasound, laser and/or magnetotherapy modules
- ◇ Connection to the BTL Vac – vacuum unit
- ◇ Optional cart

Available upgrades:

HVT Module – special generator designed for electrotherapy specialists using the High Voltage Therapy. For more information see page 14.  
Ordering No. P5600.017V102

Module Electrotherapy Plus – expand your therapy possibilities by the module Electrotherapy Plus. The module includes SW for electrodiagnostics and additional currents: Isoplanar vector field, dipole vector (manual + auto), interrupted pulses, Leduc current, H-wave, microcurrents, medium frequency surges and spastic currents. Ordering No. P5000.004V100

### General features of the BTL-5000 series

modular system



colour touch screen



therapy protocols



encyclopaedia



user-defined protocols



patient database



accessories check



multilingual unit





## THE VACUUM UNIT BTL VAC

Combine any BTL-5000 Puls, BTL-5000 Combi, BTL-4000 Puls and BTL-4000 Combi unit with the vacuum unit BTL Vac to apply electrotherapy currents by means of suction cup electrodes. Adjustable vacuum pressure ensures simple and convenient attachment of patient electrodes, especially on the parts of body hard to reach with flat rubber electrodes. In addition, the pulse mode provides mechanical massage of the tissue, improves body metabolism and increases blood supply.

The BTL Vac has 2 independent outputs and operates in both pulse and continuous mode. The unit has 4 pre-defined programmes to combine various pulse frequencies.



### Features and benefits of the BTL Vac

- ◇ Compact design
- ◇ 2 independent outputs
- ◇ Continuous and pulse mode
- ◇ 4 user-defined programmes for pulsation + 1 special programme for pulsation dependent on electrotherapy modulation
- ◇ Pulse frequency 15, 30, 45, and 60 pulses per minute
- ◇ Professionally designed suction cup electrodes with biocompatible foam sponges that prevent skin irritation
- ◇ Quiet and easy operation

### Technical specifications

Model	BTL Vac
Ordering number	PVAC.001V100
Number of outputs	2
Mode	Continuous and pulse
Pulse frequency	15, 30, 45 and 60 pulses/minute
Number of programmes	5
Dimensions (mm)	320 × 115 × 305
Weight (less accessories)	6.8 kg
Mains supply	230 V/50–60 Hz, 115 V/50–60 Hz
Standard accessories	suction cup electrodes 65 mm (4×), sponges 65mm (4×), patient cables (4×), connecting cables (2×) power cord, CD with user manual

Optional accessories: see page 60

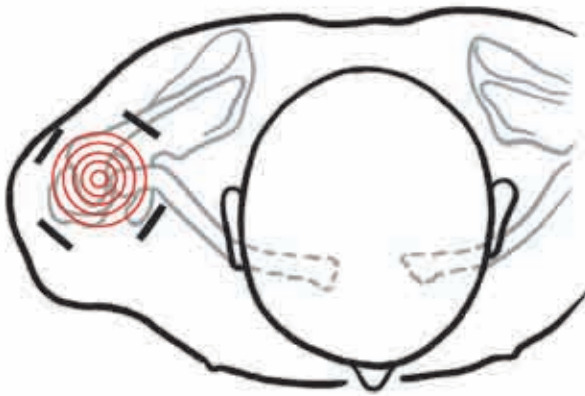
## PRE-PROGRAMMED THERAPY PROTOCOLS IN THE BTL-5000 PULS

Main fields of BTL electrotherapy applications:

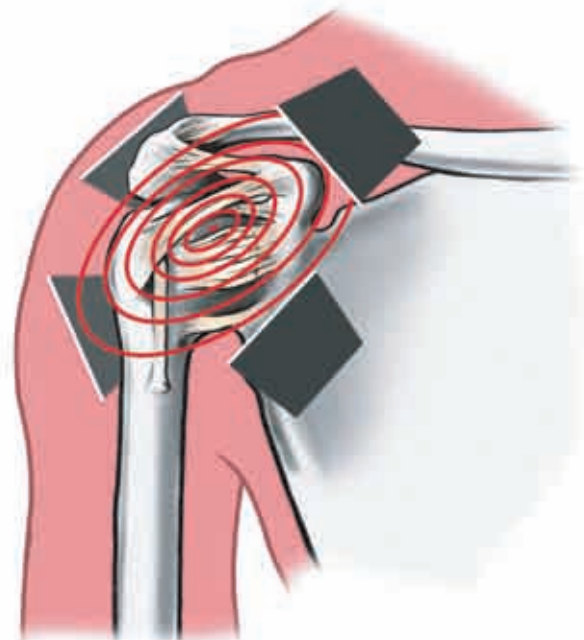
**Rehabilitation, Neurology, Orthopaedics, Sports medicine, Wellness**

### Most common pre-programmed protocols:

achillodynia, algodystrophic syndrome, arthritis rheumatoid, arthrosis acute, arthrosis chronic, acrocyanosis, Buerger´s disease, bursitis acute, contusion, intermittent claudication, iodine iontophoresis (for keloid star), potassium iontophoresis (for keloid scar), distortion, Dupuytren´s contracture, epicondylitis radial (ulnar), haemarthrosis, haematoma - peracute, intermittent claudication, herpes zooster, myalgia, muscle tonization „phasic“, muscle tonization „tonic“, neuropathy (acrohypaesthesia), neuropathy (acroparaesthesia), neuralgia, periarthrosis of the shoulder (frozen shoulder), hypertonia muscular, hypotonia muscular „phasic“, hypotonia muscular „tonic“, hypotonia muscular - postoperative, lumbalgia (low back pain), lymphoedema, neuralgia, neuralgia - greater occipital nerve, oedema reduction, Osgood-Schlatter disease, short muscles, pain postoperative, Raynaud´s disease, scoliosis, spasticity, ankylosing spondylitis – Bekhterev´s disease, tendovaginitis chronic, torn muscle, trigger points – deep, trigger points – superficial, trismus



Isoplanar field – easy application at shoulder



**FULL RANGE OF LOW AND MEDIUM FREQUENCY WAVEFORMS AND THEIR MODIFICATIONS**



Galvanic current (iontophoresis)



Diadynamic currents - type: DF, MF, CP, LP, RS, CP-ISO



Traevert, Ultra-Reiz 2-5



Faradic current



Neofaradic current



Russian stimulation (Kotz)



Stimulaton pulses (for stimulation according to electrodiagnostics) - type: rectangular, triangular (monophasic)



Rectangular pulses



Triangular pulses, exponential pulses, and exponential pulses with rise



Combined pulses - type: monophasic, symmetric, alternating; asymmetric (combined pulses)



TENS - type: asymmetric, symmetric, alternating



Interrupted pulses - type: rectangular, triangular, exponential (monophasic, symmetric, alternating)



Leduc current - type: monophasic



Microcurrents - monophasic, symmetric, alternating, combined



Medium frequency waveforms (with amplitude modulation)



Spastic stimulation (according to Hufschmidt)



4-pole interference



2-pole interference



Isoplanar field - This special form of 4-pole interference enables to reach a 100% modulation depth in all positions.



Dipole vector field - type: automatic manual



High Voltage Therapy (HVT) - type: single pike, double pike, triple pike, symmetric, alternating

Make your electrotherapy unit even more powerful with the High Voltage Therapy. This is a pulsed waveform with very short impulses. Low intensity and higher voltages have good myorelaxation and analgesic effects, and are often indicated for hypertonic muscles and reflexive muscle changes.



H-waves

This bipolar waveform (with both positive and negative elements) uses "low" (2 Hz) frequency for muscle stimulation and "high" (60 Hz) frequency for effective pain control. The increase in blood and lymph drainage accelerates removal of toxins and reduces oedema ("low" frequency), whereas the application of "high" frequency for pain management is usually well tolerated even by sensitive patients.

Modulation - constant frequency, random frequency: ± 30%



burst



sinusoidal surge



trapezoidal surge



symmetric surge

The electrodiagnostics includes:

- Measuring of I/t curves in user-defined number of points
- Free programme positions for I/t curve storing
- Determination of the motor point
- Calculation of rheobasis and chronaxie
- Measuring of the accommodation coefficient

**BTL-5000 ELECTROTHERAPY UNITS**

	BTL-5620	BTL-5625	BTL-5640	BTL-5645
Ordering No. (with 5.7" display)	P5620.101V100	P5625.101V100	P5640.103V100	P5645.103V100
Electrotherapy channels	2	2	4	4
Free channels for upgrade	2	2	2	2
Upgradeable with	E, U, L, M	E, U, L, M	U, L, M	U, L, M
<b>Types of currents:</b>				
Galvanic	◇	◇	◇	◇
Diadynamic	◇	◇	◇	◇
Programmable sequences	50	50	50	50
Traebert, Ultra-Reiz 2-5	◇	◇	◇	◇
Faradic	◇	◇	◇	◇
Neofaradic	◇	◇	◇	◇
Russian stimulation	◇	◇	◇	◇
Stimulation pulses	◇	◇	◇	◇
Rectangular pulses	◇	◇	◇	◇
TENS sym, asym, alt	◇	◇	◇	◇
2-pole interference	◇	◇	◇	◇
4-pole interference	◇	◇	◇	◇
Triangular pulses	◇	◇	◇	◇
Exponential pulses	◇	◇	◇	◇
Exponential pulses with rise	◇	◇	◇	◇
Combined pulses	◇	◇	◇	◇
Isoplanar field	-	◇	-	◇
Dipole vector (manual and auto)	-	◇	-	◇
Interrupted pulses	-	◇	-	◇
Leduc current	-	◇	-	◇
H-wave	-	◇	-	◇
Microcurrents	-	◇	-	-
Medium frequency surges	-	◇	-	◇
Spastic currents	-	◇	-	◇
Electrodiagnostics	-	◇	-	◇
High Volt therapy (HVT)	optional	optional	-	-
<b>Standard accessories</b>				
flat rubber electrodes	4×	4×	8×	8×
sponge covers	4×	4×	8×	8×
fixation belts	1×	1×	2×	2×
patient cable	2×	2×	4×	4×
pen pointer	◇	◇	◇	◇
power cord	◇	◇	◇	◇
CD with manual, user guide	◇	◇	◇	◇

E – electrotherapy, U – ultrasound, L – laser, M – magnetotherapy

◇ – standard

For ordering no. see page 34, optional accessories: see page 60



## THE ULTRASOUND THERAPY BTL-5000 SONO

The BTL-5000 Sono ultrasound series has all the features and benefits of advanced ultrasound therapy units. The ergonomically shaped multi-frequency 1 cm<sup>2</sup> head (for treating smaller areas) and 5 cm<sup>2</sup> head (for larger surface areas) have contact control and guaranteed shape of ultrasonic field. Both heads are water resistant for subaquatic treatment. The touch screen and built-in user guide facilitate easy operation.

The BTL-5000 Sono comes in two configurations, with different numbers of outputs:

- ◇ BTL-5710 Sono, 1-channel ultrasound with 2 outputs for the simultaneous connection of 2 ultrasound heads and the treatment of one patient
- ◇ BTL-5720 Sono, 2-channel ultrasound with 4 outputs (2×2 connected heads) for the independent treatment of two patients at the same time

### Features and benefits of the BTL-5000 Sono

- ◇ Multifrequency system and multifrequency heads – 1 and 3 MHz frequencies are available
- ◇ Continuous and pulse mode 10–150 Hz (adjustable in 10 Hz steps)
- ◇ Duty cycle 5–100% (fine adjustable)
- ◇ High power up to 3 W/cm<sup>2</sup>
- ◇ Ergonomic heads with visual head identification and visual patient contact indication
- ◇ Waterproof heads – suitable for subaquatic therapy
- ◇ Monitoring of patient contact quality on the display, acoustic signalization
- ◇ Simultaneous connection of both heads (four heads in case of the BTL-5720)
- ◇ BTL Unique Modular System™ – later upgrades possible
- ◇ Combination therapy – ultrasound with electrotherapy, direct input for electrotherapy
- ◇ Therapy sequences
- ◇ Optional cart

### Combine your ultrasound with electrotherapy, magnetotherapy or laser

Connect your ultrasound unit with any BTL electrotherapy unit for combination therapy. Enjoy the benefits of up to 4 therapy units in 1, by adding an electrotherapy module, laser module, magnetotherapy module or all three modules to your ultrasound equipment. For more information on the BTL Combi line, please refer to the Combi Units section on page 30 and 5 (modular system).

### General features of the BTL-5000 series

modular system



colour touch screen



therapy protocols



encyclopaedia



user-defined protocols



patient database



accessories check



multilingual unit





## ULTRASOUND HEADS

The BTL ultrasound applicators are supplied in either 1 cm<sup>2</sup> or 5 cm<sup>2</sup> size. The probes are ergonomically shaped, lightweight, waterproof and have built-in visual contact control. Both ultrasound heads employ either 1 MHz or 3 MHz frequency. Both heads are connected to the unit and are ready for use at all times. The Beam Nonuniformity Ratio (BNR) is less than 5 to avoid high concentrations of energy at one point.



5 cm<sup>2</sup> head (standard)



1 cm<sup>2</sup> head (optional)

Model	BTL-5710	BTL-5720
Ordering No. (with 5.7" colour display)	P5710.102V100	P5720.102V100
Number of independent channels	1	2
Number of heads simultaneously connected	2	4
Modular frequency	10–150 Hz	10–150 Hz
Duty factor	5–100%, in steps of 1%	5–100%, in steps of 1%
Max. output in cont. mode	2 W/cm <sup>2</sup>	2 W/cm <sup>2</sup>
Max. output in pulse mode	3 W/cm <sup>2</sup>	3 W/cm <sup>2</sup>
ERA	1 cm <sup>2</sup> and 5 cm <sup>2</sup> +/- 10%	1 cm <sup>2</sup> and 5 cm <sup>2</sup> +/- 10%
<b>Standard accessories:</b>		
large multi-frequency 5 cm <sup>2</sup> head	1×	2×
ultrasound gel 0.3l	◇	◇
holders for accessories	◇	◇
pen pointer	◇	◇
power cord	◇	◇
CD with manual and user guide	◇	◇

◇ - standard

Optional accessories: see page 60

**PRE-PROGRAMMED THERAPY PROTOCOLS IN THE BTL-5000 SONO**

Main fields of BTL ultrasound applications:

**Rehabilitation, Neurology, Orthopaedics, Sports medicine, Wellness**

**Most common pre-programmed protocols:**

algodystrophy - Sudeck syndrome, arthritis rheumatoid, arthrosis chronic, arthrosis chronic inactive, ankylosing spondylitis, bursitis acute, bursitis chronic, distortion, epicondylitis acute, epicondylitis chronic, haematoma, myospasm, muscular distension, oedema, scars acute, scars cheloid, tendovaginitis acute, tendovaginitis subacute, tendovaginitis chronic, tendinitis acute, trigger points – deep, trigger points – superficial, vasoneurosis universalis – m. Raynaud

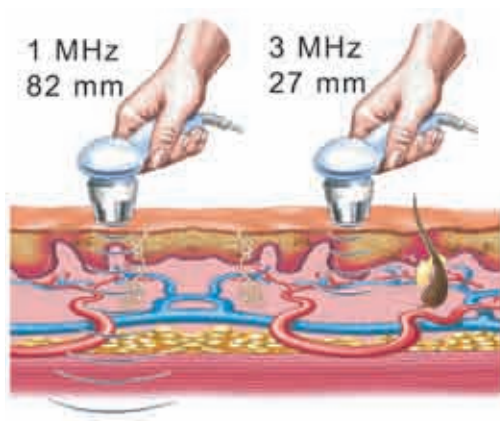
**Advanced ultrasound therapy procedures available in the BTL-5000 Sono**

**Subaqual therapy**

Subaqual therapy is suitable for uneven surfaces and small areas such as ankle joint, carpometacarpal, metacarpophalangeal and intraphalangeal joints. Thanks to the absence of direct contact of the ultrasound head with the skin, subaqual therapy is extremely suitable for posttraumatic and post surgery conditions. Sample indications: ankle joint distortion, Achilles tendon rupture, acute and chronic arthrosis, acute and chronic tendovaginitis, carpal tunnel syndrome.

**Combi therapy (ultrasound and electrotherapy)**

Dynamic application uses CV electrotherapy mode.  
 Ultrasound therapy + low frequency electrotherapy – myorelaxation of superficial muscular spasms and trigger points  
 Ultrasound + medium frequency electrotherapy – influencing reflex changes of deeply located muscles; in addition, myorelaxation effect can be increased through temperature increases with the application of continual ultrasound  
 Ultrasound + TENS – superficial effects; main indications are reflex changes in the epidermis and sub epidermis and reflex changes of superficially located muscle groups



Penetration of ultrasonic field using both 1 and 3 MHz frequencies



Pulsed ultrasonic therapy – antiedematous effect displayed



Continual ultrasonic therapy – deep thermal effect displayed

## THE LASER THERAPY BTL-5000 LASER

The BTL-5000 Laser offers the best in low level laser therapy treatment (LLLT). The modern, touch controlled display considerably simplifies the use of the unit. The built-in BTL therapy and user guide guides the operator through the entire therapy. Based on detailed research and practical use of the unit, well organised pre-programmed protocols offer recommendations for treating various conditions. The unit also includes up to 500 free file folders to define your own protocols. The wide variability of therapy parameters offers literally limitless possibilities for LLLT specialists.

The BTL-5000 Laser is available in the following models:

- ◇ BTL-5110 Laser – 1-channel laser with 2 outputs for simultaneous connection of 2 laser probes (clusters) and the treatment of one patient

### Features and benefits of the BTL-5000 Laser

- ◇ 2 outputs for simultaneous connection of red and infrared probes or laser clusters
- ◇ Continuous and pulsed laser therapy
- ◇ Frequency modulation 0–10 000Hz
- ◇ Duty cycle 10–90% (fine adjustable)
- ◇ Automatic calculation of therapy parameters (dose, area, distance and power)
- ◇ Wide range of red and infrared laser probes and laser clusters
- ◇ Pre-programmed treatment protocols for rehabilitation, orthopaedics, sports medicine, dentistry, gynaecology, dermatology, ENT, paediatrics and general practice (see page 24)
- ◇ Laser acupuncture and Nogier frequencies
- ◇ Optical attachments for ENT, gynaecology, urology and dentistry
- ◇ BTL Unique Modular System™ – later upgrades possible
- ◇ Optional cart

Model	BTL-5110
Ordering No. (with 5.7" colour display)	P5110.102V100
Number of independent channels	1
Number of probes simultaneously connected	2
Modes of operation	continual and pulsed
Dose	fine adjustable 0.1–99.0 J/cm <sup>2</sup>
Frequency	fine adjustable 0.1–10000 Hz
Divergent red probes	685 nm/30 mW, 685 nm/50 mW
Convergent infrared probes	830 nm/50 mW, 830 nm/100 mW, 830 nm/200 mW, 830 nm/300 mW, 830 nm/400 mW
Red laser cluster	685 nm/200 mW total output
Infrared laser clusters	830 nm/800 mW total output, 830 nm/1600 mW total output
Combined laser clusters	685 nm & 830 nm/1000 mW total output 685 nm & 830 nm/1800 mW total output
Laser power	adjustable 20–100%
Therapy area	adjustable 0.1–99.0 cm <sup>2</sup>
Acupuncture	points detection, visual and acoustic signalization, Nogier frequencies
Duty factor	10–90%
Laser class	3B
Standard accessories	pen-pointer, holders for accessories, power cord, CD with manual and user guide

Optional accessories: see pages 60 – 61



**General features of the BTL-5000 series**

modular system



colour touch screen



therapy protocols



encyclopaedia



user-defined protocols



patient database



accessories check



multilingual unit



## LASER PROBES

BTL offers a wide range of infrared and red probes. While infrared probes penetrate deeper into the tissue, the red probes are particularly suitable for treatment of superficial areas, such as wounds, scars and haematoma. The invisible wavelength infrared probes are supplied with an additional pilot beam. The probes can also be supplied with a specially designed holder for comfortable laser application.

Choose your probe:

Probe	Technical parameters	Ordering No.
Red probe – divergent	685 nm/30 mW	L448.000V200
Red probe – divergent	685 nm/50 mW	L448.020V200
Infrared probe – convergent	830 nm/50 mW green navigation	L448.004V200
Infrared probe – convergent	830 nm/100 mW green navigation	L448.005V200
Infrared probe – convergent	830 nm/200 mW green navigation	L448.006V200
Infrared probe – convergent	830 nm/300 mW green navigation	L448.007V200
Infrared probe – convergent	830 nm/400 mW green navigation	L448.010V200



## LASER CLUSTERS

Laser clusters offer the latest in laser therapy for the treatment of large areas. The homogenous laser energy is delivered evenly and over a short time span even for areas of 50 cm<sup>2</sup>. Areas of 50 cm<sup>2</sup> are treated with a laser beam density of 2 J/cm<sup>2</sup> for just 4 minutes.

Besides the standard laser beam, the cluster includes 13 high luminescence LEDs with wavelength of 470 nm suitable for aesthetic applications (acne, hypo-pigmentation, etc). All clusters work in continuous as well as pulsed mode and they are additionally equipped with a blue pilot beam. The laser clusters can be used with both the BTL-4000 and BTL-5000 lasers.

The laser cluster can also be supplied with a specially designed holder for comfortable laser application without the operator assistance. When using a cluster with the holder, the same results as with a laser scanner are guaranteed. Treatment results can be even maximized thanks to BTL high-powered laser clusters.

Choose your laser cluster:

Cluster	Technical parameters	Ordering number
Red cluster	685 nm/200 mW total output	L445.003V100
Infrared cluster	830 nm/800 mW total output	L445.001V100
Infrared cluster	830 nm/1600 mW total output	L445.002V100
Combined cluster	685 nm & 830 nm/1000 mW total output	L445.004V100
Combined cluster	685 nm & 830 nm/1800 mW total output	L445.005V100

Suggested indications:

Red cluster: acne, alopecia, decubitus, dermatitis, eczema, herpes zoster, rosacea, striae, ulcus cruris - foot ulcer

Infrared cluster: analgesia, arthritis rheumatoid, arthrosis, contusion, decubitus, distorsion, enthesopathy, ischialgia, myorelaxation, sacralgia, back pain (dorsalgia), chondromalacia patella



## PRE-PROGRAMMED THERAPY PROTOCOLS IN BTL-5000 LASERS

Main fields of BTL laser applications:

**Rehabilitation, Neurology, Orthopaedics, Sports medicine, Wellness**

**Most common pre-programmed protocols in these fields:**

achillodynia, analgesia, ankylosing spondylitis, arthritis, arthritis rheumatoid, arthritis uratica - gout, arthrosis, bursitis, back pain (dorsalgia), carpal tunnel, contusion, decubitus, distortion, Dupuytren's disease, enthesopathy, epicondylitis, haematoma, chondromalacia patellae, ischialgia, migraena, myorelaxation, neuralgia, oedema, paresis of facial nerve, plantar fasciitis, sacralgia, scar, Tietze's syndrome - costochondritis, tinnitus, trigeminal neuralgia, tendinopathy, tendovaginitis, vertebral syndrome

Other fields of BTL laser applications:

**Dentistry, Dermatology, Gynaecology, General practitioner**

**Most common pre-programmed protocols in these fields:**

acne, alopecia, alveolitis, analgesia, atopic eczema, aphthous stomatitis, dental caries, scar cheloid, scar recent, contusion, decubitus, difficult dentition - analgesia, fractura - analgesia, gingivitis, herpes, pulpal hyperemia, dentine hypersensitivity, temporomandibular disorder, parodontitis, tooth post extraction, open pulp, pulpitis, postoperative treatment, combustio (burns), dermatitis, perioral dermatitis, eczema, furuncle, haematoma, striae, ulcus cruris - foot ulcer, dysmenorrhoea, Bartholin's gland - abscess, cervicitis, colpitis, herpes genitalis, urinary incontinence, parametritis, striae, irritable bladder, vulvitis, furuncle, otitis media acute, otitis media chronic, pharyngitis, rhinitis, sinusitis, tinnitus, tonsillectomy, tonsillitis, tonsillopharyngitis, Peyronie's disease



Infrared cluster application



Red cluster application

## THE MAGNETOTHERAPY BTL-5000 MAGNET

Based on many years' experience, we have designed one of the most powerful magnetotherapy units on the market. High powered magnetotherapy modules have been integrated into the BTL-5000 to enhance the system's already exceptional features.

Although a relatively new and less established treatment modality, pulsed magnetic fields (PMF) have been used with good therapeutic results for an excellent complementary treatment in the physiotherapy office. The most significant benefits relate to pain relief, anti-inflammatory effects and the acceleration of healing. The unit is easily operated using built-in therapy protocols or therapies may be adjusted manually. The unit allows the versatility for specialists to create their own therapy sequences and programmes.

The BTL-5000 Magnet comes in two modifications:

- ◇ BTL-5920 Magnet – 2-channel magnetotherapy unit
- ◇ BTL-5940 Magnet – 4-channel magnetotherapy unit

Features and benefits of the BTL-5000 Magnet

- ◇ Pulsed Magnetic Field (PMF), rectangular, triangular, sinusoidal, exponential and continual
- ◇ Combination of pulsed and static magnetic field with adjustable ratio (for acute and anti-inflammatory therapies)
- ◇ Modulation of pulses: burst, sinusoidal surge, trapezoidal surge, symmetric surge
- ◇ User-defined magnetic pulses series
- ◇ Focused Magnetic Field (FMF) Technology™
- ◇ Pulse frequency 0–160 Hz
- ◇ Comfortable and lightweight applicators
- ◇ Random frequency (Wave swing)
- ◇ BTL Unique Modular System™ – later upgrades possible
- ◇ Optional cart

### General features of the BTL-5000 series

modular system



colour touch screen



therapy protocols



encyclopaedia



user-defined protocols



patient database



accessories check



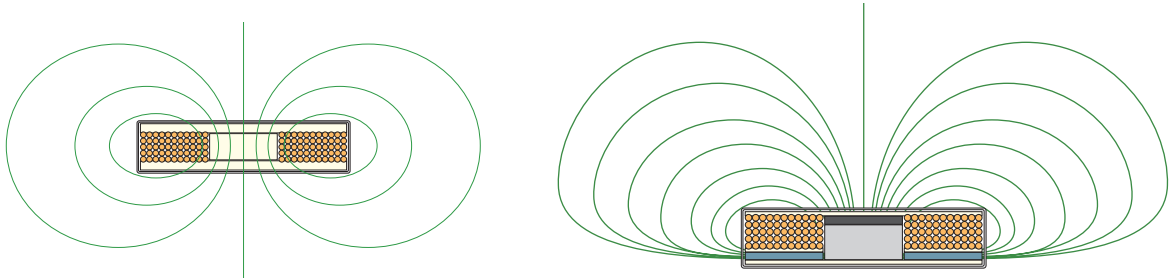
multilingual unit





## MAGNETOTHERAPY APPLICATORS

Thanks to their unique construction, BTL applicators are exceptionally lightweight and easy to transport. Using FMF or Focused Magnetic Field, the BTL magnetotherapy unit can easily share a common couch or chair with other medical devices. The upper layer of all the applicators is made of a soft touch, fully washable and disinfection safe material suitable for long-term use. Applicators are also equipped with a stationary magnetic field generator. The combination of dynamic pulsed and stationary magnetic field is suitable for acute stage and anti-inflammatory indications.



Standard Magnetic Applicator  
 ● Dynamic Pulsed Magnetic Field Generator

FMF Technology Magnetic Applicator  
 ■ Stationary Magnetic Field Generator  
 ● Dynamic Pulsed Magnetic Field Generator  
 □ FMF Core  
 ■ FMF Reflector

### Choose your BTL magnetic applicators with FMF Technology™

Disc – for local applications / Ordering No. P5900.001V101

Double disc – for two-side applications / Ordering No. P5900.002V101

Multi disc – for multi applications (pelvic, abdominal, extremity longitudinal application etc.) / Ordering No. P5900.003V101



Big Solenoid ø 60 cm – for spine and hips applications / Ordering No. P5900.006V101

Small Solenoid ø 30cm – for extremities applications / Ordering No. P5900.005V101



Linear applicator – for spine and other longitudinal applications / Ordering No. P5900.004V201

## THE MAGNETOTHERAPY COUCH BTL-1900 MAGNET

The BTL-1900 Magnet couch has been designed for comfortable application of magnetotherapy for both the patient and therapist. Even patients with low mobility can be treated easily and comfortably.

- ◇ Magnetotherapy couch with sliding solenoid  $\varnothing$  70 cm
- ◇ Easy and comfortable solenoid positioning
- ◇ Unique FMF (Focused Magnetic Field) Technology™
- ◇ High powered magnetic field focused to the therapy area with no side-effects to personnel
- ◇ Foldable couch frame for easy transportation
- ◇ Optional underhead pillow



BTL-1900 Magnet - magnetotherapy couch for comfortable spine and hips applications  
/ Ord. No P5900.017v100

### Specifications of the BTL-1900 Magnet

Length	200 cm
Width (with solenoid)	74 cm
Height (with solenoid)	110 cm
Weight (with solenoid)	67 kg

Magnetotherapy model	BTL-5920	BTL-5940
Ordering No. (with 5.7" colour display)	P5920.101V100	P5940.101V100
Ordering No. (with 8.4" colour TFT display)	P5920.002V200	P5940.002V200
Number of output channels	2	4
Maximum pulse induction*	128 mT	128 mT
Frequency range	0–160 Hz	0–160 Hz
Wave swing	- 20%	- 20%
Standard accessories	extension cables for magnetotherapy applicators, pen-pointer, power cord, CD with manual and user guide	

\*different for each applicator

Optional accessories: see page 61

## PRE-PROGRAMMED THERAPY PROTOCOLS IN THE BTL-5000 MAGNET

Main fields of BTL magnetotherapy applications:

**Rehabilitation, Neurology, Orthopaedics, Rheumatology, Wellness**

**Most common pre-programmed protocols in these fields:**

alloplastics, arthritis rheumatoid, arthrodesis, arthrosis, ankylosing spondylitis, algodystrophy - Sudeck syndrome, carpal tunnel, cervicobrachial syndrome, cervicocranial syndrome, coxalgia, coxarthrosis (hip arthrosis), decubitus, distension, distorsion, epicondylitis, fracture, gonalgia, gonarthrosis, ischaemia, lumbosacral syndrome, metatarsalgia, myalgia, myopathia, muscle spasm, multiple sclerosis - cerebrospinal type, nerve paralysis, neurodermatitis, Perthes disease, osteoporosis, osteonecrosis, osteosynthesis, osteochondrosis, osteomyelitis, periarthrosis of the shoulder (frozen shoulder), poliomyelitis anterior, polyarthritits, pseudoarthrosis, posttraumatic recovery, spinal degeneration, tendinopathy, vertebral syndrome

Other fields of BTL magnetotherapy applications:

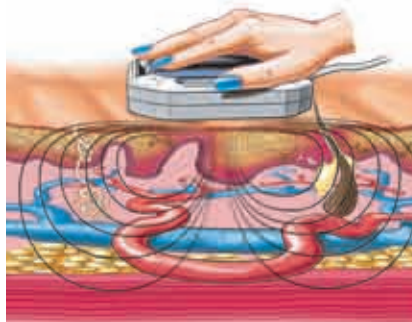
**Dermatology, Gastro-enterology, Gynaecology, Dentistry, Pneumology**

**Most common pre-programmed protocols in these fields:**

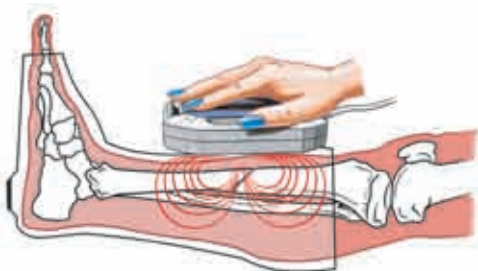
allergic rhinitis, atherosclerosis, bronchial asthma, bronchitis chronic, chronic adnexitis, chronic obstructive pulmonary disease, colitis, decubitus, dermatitis atopic, dysmenorhea, eczema atopicum, enuresis, eczema atopicum, endometriosis, gastric and duodenal ulcer, migraine, pankreatitis, parodontosis, periostitis psoriasis, sinusitis, tooth post extraction pain, ulcus cruris – foot ulcer



Normal tissue



Magnetotherapy – vasodilatation and myorelaxation effect displayed



Magnetotherapy  
 – fracture application displayed (trans-plaster application by FMF technology)  
 – magnetotherapy enhances osteogenesis

**THE BTL-5000 & BTL-4000 CART**

Ordering No. P5002.009V110 (for BTL-5000), P5002.012V100 (for BTL-4000).



Specifications of the BTL cart	BTL-5000 & BTL-4000 cart
Dimensions (L × H × W)	56 × 95 × 55 cm
Weight	20 kg



## THE BTL-5000 COMBI: FOUR THERAPIES IN ONE UNIT

### UNLIMITED POSSIBILITIES WITH BTL'S MODULAR SYSTEM!

- ◇ Most cost effective combination unit
- ◇ Up to four physiotherapy treatments in one unit
- ◇ The best physiotherapy parameters available
- ◇ Possibility of later upgrade
- ◇ All therapies applied from one unit

### ELECTROTHERAPY + ULTRASOUND + LASER + MAGNETOTHERAPY

- ◇ Complete selection of treatment parameters available
- ◇ Cost savings on the initial investment, plus time and space savings in the office
- ◇ Convenient for the patient since the different therapies are applied at a single office location
- ◇ Most importantly, units may be later upgraded to new levels of performance as needed

#### Touch screen

The touch screen with its pen pointer considerably simplifies the use of the unit. To adjust the parameters, simply touch the on-screen buttons and turn the main knob to set the intensity.

#### BTL Therapeutic Encyclopaedia

A full-colour, therapeutic encyclopaedia with therapy descriptions, built-in diagnoses, therapy procedures as well as anatomical and applicator positioning images.

#### Pre-programmed Protocols

Pre-programmed therapy protocols offer recommendations for treating various conditions and provide a guide for the selected therapy. Simply choose a diagnosis from the list of alphabetically organised protocols or select a programme to initiate treatment.

#### User-defined Protocols and Patient Database

The large memory capacity allows the storage of your own user-defined therapy protocols. Input your patient's names and other relevant information to the unit's internal memory and then add their data to the pre-programmed (or your own) protocols.

#### Multilingual Unit

The BTL-5000 COMBI unit can be set to operate in different languages.

For details of individual therapy systems, please refer to the follow sections:

- Electrotherapy on page 10
- Ultrasound therapy on page 16
- Laser Therapy on page 20
- Magnetotherapy on page 24

### General Features of the BTL-5000 Series

modular system



colour touch screen



therapy protocols



encyclopaedia



user-defined protocols



patient database



accessories check



multilingual unit



## UP TO 4 THERAPIES IN 1 UNIT



### ELECTROTHERAPY

Electrotherapy with  
2 independent channels  
and full range of waveforms



### ULTRASOUND

Multifrequency ultrasound with  
visual & acoustic contact control  
(1 and 3 MHz)



### LASER

Laser with a choice  
of powerful laser probes  
and laser clusters



### MAGNETOTHERAPY

Magnetotherapy with FMF  
(Focused Magnetic Field)  
Technology™



## THE BTL-5000 COMBI UNITS

---

### ELECTROTHERAPY + ULTRASOUND

#### BTL-5820 S COMBI/BTL-5825 S COMBI

- ◇ **Electrotherapy** with two independent channels
- ◇ Extended range of currents (BTL-5825 S Combi)
- ◇ Multifrequency **Ultrasound** with visual  
 & acoustic contact control (1 and 3 MHz)



### ELECTROTHERAPY + ULTRASOUND + LASER

#### BTL-5820 SL COMBI/BTL-5825 SL COMBI

- ◇ **Electrotherapy** with two independent channels
- ◇ Extended range of currents (BTL-5825 SL Combi)
- ◇ Multifrequency **Ultrasound** with visual  
 & acoustic contact control (1 and 3 MHz)
- ◇ **Laser** with a choice of powerful laser probes  
 and laser clusters



### ELECTROTHERAPY + ULTRASOUND + LASER + MAGNETOTHERAPY

#### BTL-5816 SLM COMBI/ BTL-5818 SLM COMBI

- ◇ Interferential **Electrotherapy** (2-pole and 4-pole)
- ◇ Extended range of currents (BTL-5818 SLM Combi)
- ◇ Multifrequency **Ultrasound** with visual  
 & acoustic contact control (1 and 3 MHz)
- ◇ **Laser** with a choice of powerful laser probes  
 and laser clusters
- ◇ **Magnetotherapy** with FMF  
 (Focused Magnetic Field) Technology™



## THE BTL-5000 COMBI UNITS

## ELECTROTHERAPY + LASER

## BTL-5825 L COMBI

- ◇ **Electrotherapy** with two independent channels
- ◇ Extended range of currents
- ◇ **Laser** with a choice of powerful laser probes and laser clusters



## ELECTROTHERAPY + MAGNETOTHERAPY

## BTL-5825 M2 COMBI

- ◇ **Electrotherapy** with two independent channels
- ◇ Extended range of currents
- ◇ 2-channel **Magnetotherapy** with FMF (Focused Magnetic Field) Technology™



## ULTRASOUND + LASER

## BTL-5800 SL COMBI

- ◇ Multifrequency **Ultrasound** with visual & acoustic contact control (1 and 3 MHz)
- ◇ **Laser** with a choice of powerful laser probes and laser clusters



## LASER + MAGNETOTHERAPY

## BTL-5800 LM2 COMBI

- ◇ **Laser** with a choice of powerful laser probes and laser clusters
- ◇ 2-channel **Magnetotherapy** with FMF (Focused Magnetic Field) Technology™



## OVERVIEW OF THE BTL-5000 MODELS

		Electrotherapy channels	4-pole electrotherapy channels	Ultrasound therapy channels	Laser therapy channels	Magnetotherapy channels	All therapeutic channels	Ordering No.	Electrotherapy waveforms identical to: (see page 15)	
Combi therapy	BTL-5820 S	2	-	1	-	-	3	P5820.103V100	BTL-5620	
	BTL-5825 S	2	-	1	-	-	3	P5825.103V100	BTL-5625	
	BTL-5820 SL	2	-	1	1	-	4	P5820.101V100	BTL-5620	
	BTL-5825 SL	2	-	1	1	-	4	P5825.101V100	BTL-5625	
	BTL-5816 SLM	-	1	1	1	1	4	P5816.129V100	BTL-5640	
	BTL-5818 SLM	-	1	1	1	1	4	P5818.129V100	BTL-5645	
	BTL-5825 L	2	-	-	1	-	3	P5825.105V100	BTL-5625	
	BTL-5825 M2	2	-	-	-	2	4	P5825.123V100	BTL-5625	
	BTL-5800 SL	-	-	1	1	-	2	P5800.101V100	-	
	BTL-5800 LM2	-	-	-	1	2	3	P5800.119V100	-	
Single therapy	Electrotherapy – Puls	BTL-5620 Puls	2	-	-	-	2	P5620.101V100	-	
		BTL-5625 Puls	2	-	-	-	2	P5625.101V100	-	
		BTL-5640 Puls	4	-	-	-	4	P5640.103V100	-	
		BTL-5645 Puls	4	-	-	-	4	P5645.103V100	-	
	Ultrasound	BTL-5710 Sono	-	-	1	-	-	1	P5710.101V100	-
		BTL-5720 Sono	-	-	2	-	-	2	P5720.102V100	-
	Laser	BTL-5110 Laser	-	-	-	1	-	1	P5110.101V100	-
	Magnet	BTL-5920 Magnet	-	-	-	-	2	2	P5920.101V100	-
		BTL-5940 Magnet	-	-	-	-	4	4	P5940.101V100	-

## Electrotherapy currents

**BTL-5620, BTL-5640, BTL-5820 S, BTL-5820 SL, BTL-5816 SLM:**

Galvanic, Diadynamic, Programmable sequences, Traebert, Ultra-Reiz 2-5, Faradic, Neofaradic, Russian stimulation, Stimulation pulses, Rectangular pulses, TENS (sym, asym, alt), 2-pole interference, 4-pole interference, Triangular pulses, Exponential pulses, Exponential pulses with rise, Combined pulses

**BTL-5625, BTL-5645, BTL-5825 S, BTL-5825 SL, BTL-5818 SLM, BTL-5825 L, BTL-5825 M2:**

Galvanic, Diadynamic, Programmable sequences, Traebert, Ultra-Reiz 2-5, Faradic, Neofaradic, Russian stimulation, Stimulation pulses, Rectangular pulses, TENS (sym, asym, alt), 2-pole interference, 4-pole interference, Triangular pulses, Exponential pulses, Exponential pulses with rise, Combined pulses, Isoplanar field, Dipole vector (manual and automatic), Interrupted pulses, Leduc current, H-wave, Microcurrents (except BTL-5645, BTL-5818 SLM), Medium frequency surges, Spastic currents, Electrodiagnostics

## High Volt therapy (HVT) option

HVT is possible for: BTL-5620, BTL-5625, BTL-5820 S





## **BTL-4000**


**AFTER SUCCESSFUL MARKET INTRODUCTION OF THE BTL-5000 SERIES, BTL INTRODUCED A NEW AND INNOVATIVE PHYSICAL THERAPY PRODUCT LINE, THE BTL-4000 SERIES.**


**THE BTL-4000 PRODUCT RANGE OFFERS AN EFFECTIVE SOLUTION TO ALL YOUR PHYSIOTHERAPY NEEDS, FEATURING FULL RANGE OF PARAMETERS AND A GREAT VARIETY OF FUNCTIONS COMBINED WITH EASY-TO-USE OPERATION.**








**THE MAIN FEATURES OF THE BTL-4000 SERIES INCLUDE:**


- 


up to 2 types of physiotherapy treatments in one unit – combination of electrotherapy, ultrasound, laser or magnetotherapy
- 


4.3" colour touch screen display (BTL-4000 Topline)
- 


graphic display (BTL-4000 Professional)
- 


numeric displays for time/intensity
- 


built-in rechargeable battery and mains supply
- 


built-in BTL therapy guide  
– therapeutic protocols
- 

therapeutic encyclopaedia
- 

user-defined therapeutic protocols
- 

sound prompt and volume adjustment, auto switch-off
- 

self test of applicators, electrodes and patient cables  
visual identification of active accessory
- 

multilingual unit
- 

portability

**General technical specifications of the BTL-4000 series**

Dimensions (mm)	160 × 140 × 350
Weight (kg) – less accessories	max. 3 kg
Power supply	100–240 V, 50–60 Hz
Internal rechargeable battery	BTL-4000 Topline and BTL-4000 Professional
Charging time	max. 3 hours
Class according to MDD 93/42/EEC	IIb
Equipment protection class	II (according to IEC 536)

**THE ELECTROTHERAPY BTL-4000 PULS TOPLINE & PROFESSIONAL**

The BTL-4000 Puls Topline and Professional electrotherapy products are offered as 1 or 2-channel electrotherapy units, with a full selection of waveforms - for details see page 40. All models have a built-in rechargeable battery. In addition, the BTL-4000 Puls Topline units feature a 4.3" colour touch screen for comfortable operation and colour therapeutic encyclopaedia.

**Features and benefits of the BTL-4000 Topline and Professional electrotherapy**

- ◇ Full range of low and medium frequency waveforms and their modifications (see page 40)
- ◇ +/- Easy change of electrodes' polarity
- ◇ Constant Current and Constant Voltage modes – CC/CV
- ◇ Programmable sequences
- ◇ Electrodiagnostics: I/t curve, motoric point, rheobasis and chronaxie, accommodation coefficient (BTL-4625)
- ◇ Test of electrodes and patient cables' quality
- ◇ Combination with ultrasound or laser or magnetotherapy modules
- ◇ Connection to the BTL Vac – vacuum unit (option)
- ◇ Optional cart



BTL-4000 Topline

**THE ELECTROTHERAPY BTL-4000 PULS TOPLINE & PROFESSIONAL**



BTL-4000 Professional

rechargeable battery



encyclopaedia



therapy protocols



multilingual unit



portability



user-defined protocols



**Expand your electrotherapy possibilities by using the BTL Vac**

For details see page 12



## THE ELECTROTHERAPY BTL-4000 TOPLINE

	BTL-4610 Topline	BTL-4620 Topline	BTL-4625 Topline
Ordering number	P4610.003V100	P4620.003V100	P4625.003V100
Control display	touch screen	touch screen	touch screen
Pre-programmed protocols	◇	◇	◇
Colour therapeutic encyclopaedia with anatomical pictures	◇	◇	◇
User-defined protocols	◇	◇	◇
Patient protocols	◇	◇	◇
Free memory positions	200	200	200
Electrotherapy channels	1	2	2
Galvanic	◇	◇	◇
Diadynamic	◇	◇	◇
Prog. sequences	20	20	20
Trabert	◇	◇	◇
Faradic	◇	◇	◇
Neofaradic	◇	◇	◇
Russian stimulation	◇	◇	◇
Stimulation pulses	◇	◇	◇
Rectangular pulses	◇	◇	◇
TENS sym, asym, alt	◇	◇	◇
2-pole interference	◇	◇	◇
4-pole interference	-	◇	◇
Triangular pulses	◇	◇	◇
Exponential pulses	◇	◇	◇
Exponential pulses with rise	◇	◇	◇
Combined pulses	◇	◇	◇
Isoplanar field	-	-	◇
Dipole vector	-	-	◇
Interrupted pulses	-	-	◇
Leduc current	-	-	◇
H-wave	-	-	◇
Microcurrents	-	-	◇
Medium frequency surges	-	-	◇
Spastic current	-	-	◇
Electrodiagnostics	-	-	◇
HVT (option)	optional	-	-
<b>Standard accessories</b>			
rubber electrodes	2×	4×	4×
sponge covers	2×	4×	4×
fixation belts	1×	1×	1×
patient cable	1×	2×	2×
adapter	◇	◇	◇
CD with user manual	◇	◇	◇

◇ - standard

Optional accessories: see page 60

## THE ELECTROTHERAPY BTL-4000 PROFESSIONAL

	BTL-4610 Professional	BTL-4620 Professional	BTL-4625 Professional
Ordering number	P4610.002V100	P4620.002V100	P4625.002V100
Control display	graphic display	graphic display	graphic display
Pre-programmed protocols	◇	◇	◇
Colour therapeutic encyclopaedia with anatomical pictures	-	-	-
User-defined protocols	◇	◇	◇
Patient protocols	-	-	-
Free memory positions	30	30	30
Electrotherapy channels	1	2	2
Galvanic	◇	◇	◇
Diadynamic	◇	◇	◇
Prog. sequences	20	20	20
Trabert	◇	◇	◇
Faradic	◇	◇	◇
Neofaradic	◇	◇	◇
Russian stimulation	◇	◇	◇
Stimulation pulses	◇	◇	◇
Rectangular pulses	◇	◇	◇
TENS sym, asym, alternating	◇	◇	◇
2-pole interference	◇	◇	◇
4-pole interference	-	◇	◇
Triangular pulses	◇	◇	◇
Exponential pulses	◇	◇	◇
Exponential pulses with rise	◇	◇	◇
Combined pulses	◇	◇	◇
Isoplanar field	-	-	◇
Dipole vector	-	-	◇
Interrupted pulses	-	-	◇
Leduc current	-	-	◇
H-wave	-	-	◇
Microcurrents	-	-	◇
Medium frequency surges	-	-	◇
Spastic current	-	-	◇
Electrodiagnostics	-	-	◇
HVT (option)	optional	-	-
<b>Standard accessories</b>			
rubber electrodes	2×	4×	4×
sponge covers	2×	4×	4×
fixation belts	1×	1×	1×
patient cable	1×	2×	2×
adapter	◇	◇	◇
CD with user manual	◇	◇	◇

◇ - standard

Optional accessories: see page 60

For description of all electrotherapy currents see page 14

## THE ULTRASOUND THERAPY BTL-4710 SONO TOPLINE & PROFESSIONAL

The BTL-4710 Sono Topline and Professional ultrasound units feature outstanding parameters, ergonomic design and maximum flexibility due to the built-in rechargeable battery feature. In addition, the BTL-4000 Sono Topline units feature 4.3" colour touch screen for comfortable operation and colour therapeutic encyclopaedia.

### The BTL-4710 Sono Topline and Professional features and benefits

- ◇ Multifrequency system and multifrequency heads – 1 and 3 MHz frequencies are available
- ◇ Continuous and pulsed mode 10–150 Hz (step 10 Hz)
- ◇ Duty cycle 6.25%, 12.5%, 25%, 50%, 100%
- ◇ High power up to 3 W/cm<sup>2</sup>
- ◇ Ergonomic heads with visual head identification and visual patient contact indication
- ◇ Waterproof heads – suitable for subaquatic therapy
- ◇ Monitoring of patient contact quality on the display, acoustic signalization
- ◇ Simultaneous connection of both heads
- ◇ Combination therapy – ultrasound with electrotherapy, direct input for electrotherapy
- ◇ Therapy sequences
- ◇ Optional cart



BTL-4000 Topline

### Ultrasound heads

The BTL ultrasound applicators are supplied either in 1 cm<sup>2</sup> or 5 cm<sup>2</sup> size. The probes are ergonomically shaped, lightweight, waterproof and have built-in visual contact control.

Both ultrasound heads employ either 1 MHz or 3 MHz frequency. Both heads are connected to the unit and are ready for use at all times. The Beam Nonuniformity Ratio (BNR) is less than 5 to avoid high concentrations of energy at one point.



**THE ULTRASOUND THERAPY BTL-4710 SONO TOPLINE & PROFESSIONAL**

rechargeable battery



encyclopaedia



therapy protocols



multilingual unit



portability



user-defined protocols



BTL-4000 Professional

Model	BTL-4710 Sono Topline	BTL-4710 Sono Professional
Ordering No.	P4710.003V100	P4710.002V100
Control display	touch screen	graphic display
Pre-programmed protocols	◇	◇
Colour therapeutic encyclopaedia with anatomical pictures	◇	-
User-defined protocols	◇	◇
Patient protocols	◇	-
Free memory positions	200	30
Number of independent channels	1	1
Number of heads simultaneously connected	2	2
Modular frequency	10-150 Hz	10-150 Hz
Duty factor	6.25%, 12.5%, 25%, 50%, 100%	6.25%, 12.5%, 25%, 50%, 100%
Max. output in cont. mode	2 W/cm <sup>2</sup>	2 W/cm <sup>2</sup>
Max. output in pulse mode	3 W/cm <sup>2</sup>	3 W/cm <sup>2</sup>
ERA	1 cm <sup>2</sup> and 5 cm <sup>2</sup> +/- 10%	1 cm <sup>2</sup> and 5 cm <sup>2</sup> +/- 10%
<b>Standard accessories</b>		
large 5 cm <sup>2</sup> head	1/3 MHz	1/3 MHz
ultrasound gel 0.3 l	◇	◇
adapter, CD with manual and user guide	◇	◇

◇ - standard

Optional accessories: see page 60



### THE LASER THERAPY BTL-4110 LASER TOPLINE & PROFESSIONAL

The BTL-4110 Laser Topline and Professional is a low level laser therapy unit offering a wide selection of specialised therapeutic programmes for physical therapy and other medical applications. The variability of therapy parameters offers multiple options for LLLT specialists. In addition, BTL-4000 Laser Topline units feature 4.3" colour touch screen for efficient operation and colour therapeutic encyclopaedia.

#### Features and benefits of the BTL-4110 Laser Topline and Professional

- ◇ Large selection of red and infrared laser probes and clusters – 2 probes can be simultaneously connected (for detailed parameters see page 22)
- ◇ Continuous and pulse laser therapy (frequency modulation 0–10000 Hz)
- ◇ Pre-programmed treatment protocols for rehabilitation, orthopaedics, sports medicine, dentistry, gynaecology, dermatology, ENT, paediatrics and general practice (see page 23)
- ◇ Duty factor 10–90%
- ◇ Acupuncture set for laser acupuncture and Nogier frequencies
- ◇ Choice of optical attachments for ENT, gynaecology, urology and dentistry
- ◇ Optional cart



BTL-4000 Topline

rechargeable battery



encyclopaedia



therapy protocols



multilingual unit



portability



user-defined protocols



## THE LASER THERAPY BTL-4110 LASER TOPLINE & PROFESSIONAL



BTL-4000 Professional

Model	BTL-4110 Laser Topline	BTL-4110 Laser Professional
Ordering No.	P4110.003V100	P4110.002V100
Control display	touch screen	graphic display
Pre-programmed protocols	◇	◇
Colour therapeutic encyclopaedia with anatomical pictures	◇	-
User-defined protocols	◇	◇
Patient protocols	◇	-
Free memory positions	200	30
No. of channels	1	1
Probes connected simult.	2	2
Modes of operation	continual and pulse	continual and pulse
Dose	0.1–99.0 J/cm <sup>2</sup> (fine adjustable)	0.1–99.0 J/cm <sup>2</sup> (fine adjustable)
Frequency	0.1–10000 Hz (fine adjustable)	0.1–10000 Hz (fine adjustable)
Laser power	20–100% (fine adjustable)	20–100% (fine adjustable)
Therapy area	0.1–99.0 cm <sup>2</sup>	0.1–99.0 cm <sup>2</sup>
Acupuncture	points detection, visual and acoustic signalization, Nogier frequencies	
Duty factor	10–90%	10–90%
Laser class	3B	3B
Standard accessories	adapter, CD with manual and user guide	

Optional accessories: see pages 60 – 61

### THE MAGNETOTHERAPY BTL-4920 MAGNET TOPLINE & PROFESSIONAL

The BTL-4920 Magnet Topline and Professional is an advanced magnetotherapy device offering a wide selection of therapeutic programmes for physical therapy and other medical fields. The variability of therapy parameters offers flexible options for magnetotherapy specialists. In addition, the BTL-4000 Magnet Topline units feature 4.3" colour touch screen for comfortable operation and colour therapeutic encyclopaedia.

#### Features and benefits of the BTL-4920 Magnet Topline and Professional

- ◇ Pulsed Magnetic Field (PMF), rectangular, triangular, sinusoidal, exponential and continual
- ◇ Combination of pulsed and static magnetic field with adjustable ratio (for acute and anti-inflammatory therapies)
- ◇ Modulation of pulses: burst, sinusoidal surge, trapezoidal surge, symmetric surge
- ◇ User-defined magnetic pulse series
- ◇ Built-in magnetotherapy protocols (see page 28)
- ◇ Focused Magnetic Field (FMF) Technology™
- ◇ Pulse frequency 0–160 Hz
- ◇ Comfortable and lightweight applicators
- ◇ Random frequency (Wave swing)
- ◇ Optional cart



BTL-4000 Topline

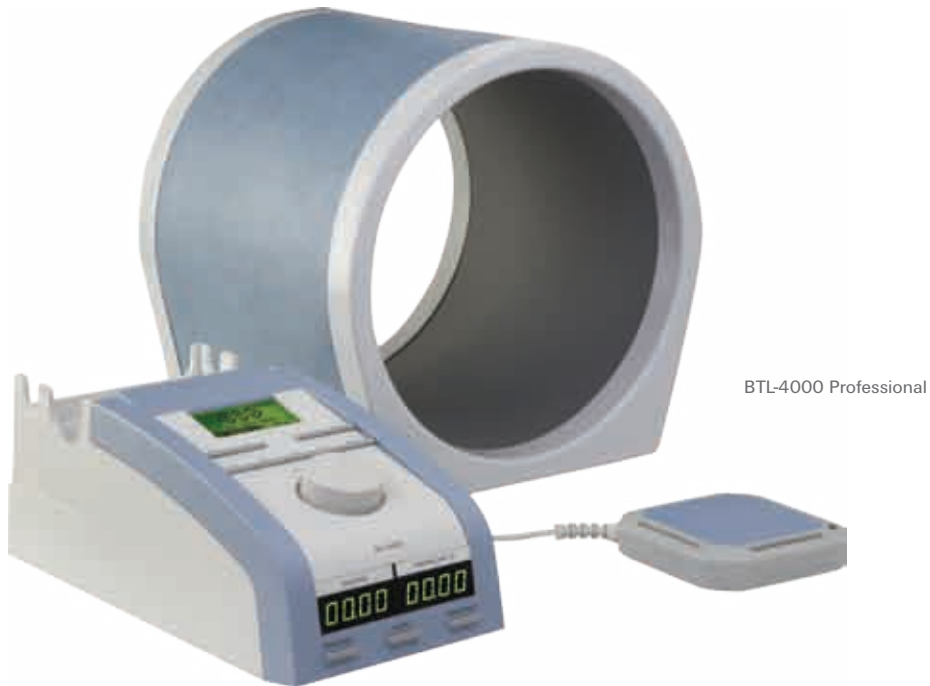
#### Choose your BTL magnetic applicators with FMF Technology™

For details about the applicators see page 26

For details about the magnetotherapy couch see page 27



**THE MAGNETOTHERAPY BTL-4920 MAGNET TOPLINE & PROFESSIONAL**



rechargeable battery



encyclopaedia



therapy protocols



multilingual unit



portability



user-defined protocols



Model	BTL-4920 Topline	BTL-4920 Professional
Ordering No.	P4920.302V100	P4920.002V100
Control display	touch screen	graphic display
Pre-programmed protocols	◇	◇
Colour therapeutic encyclopaedia with anatomical pictures	◇	-
User-defined protocols	◇	◇
Patient protocols	◇	-
Free memory positions	200	30
Number of output channels	2	2
Maximum pulse induction*	128 mT	128 mT
Frequency range	0-160 Hz	0-160 Hz
Wave swing	- 20%	- 20%
Standard accessories	2x extension cables for magnetotherapy applicators, adapter, CD with manual and user guide	

\*different for each applicator

Optional accessories: see page 61

### THE BTL-4000 COMBI TOPLINE & PROFESSIONAL

The BTL-4000 Combi Topline and Professional units combine two physiotherapy treatments in one unit. Select a combination of two selected treatments options — electrotherapy, ultrasound, laser therapy or magnetotherapy in a single device. In addition, BTL-4000 Combi Topline units offer the option of 3 independent channels, such as 2-channel electrotherapy and ultrasound.

Delivery of two different types of physical therapy treatments from one unit saves time, office space while maximizing your investment.

The particular therapy modules built into the BTL-4000 Combi Topline and Professional units have all the features of the single therapy BTL-4000 Topline and Professional units described previously (see pages 38 – 47).

Optional accessories: see pages 60 – 61



BTL-4000 Professional



BTL-4000 Topline

2-in-1 unit



rechargeable battery



encyclopaedia



therapy protocols



multilingual unit



portability



user-defined protocols



## THE BTL-4000 COMBI UNITS

## ELECTROTHERAPY + ULTRASOUND

## BTL-4810 S COMBI PROFESSIONAL

- ◇ 1-channel **Electrotherapy**
- ◇ Multifrequency **Ultrasound** with visual & acoustic contact control (1 and 3 MHz)



## ELECTROTHERAPY + ULTRASOUND

## BTL-4816 S COMBI PROFESSIONAL/BTL-4818 S COMBI PROFESSIONAL

- ◇ Interferential **Electrotherapy** (2-pole & 4-pole)
- ◇ Extended range of waveforms (BTL-4818 S Combi)
- ◇ Multifrequency **Ultrasound** with visual & acoustic contact control (1 and 3 MHz)



## ELECTROTHERAPY + ULTRASOUND

## BTL-4820 S COMBI TOPLINE/BTL-4825 S COMBI TOPLINE

- ◇ 2-channel **Electrotherapy**
- ◇ Extended range of waveforms (BTL-4825 S Combi)
- ◇ Multifrequency **Ultrasound** with visual & acoustic contact control (1 and 3 MHz)





## THE BTL-4000 COMBI UNITS

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### ULTRASOUND + LASER

#### BTL-4800 SL COMBI TOPLINE

- ◇ Multifrequency **Ultrasound** with visual & acoustic contact control (1 and 3 MHz)
- ◇ **Laser** with a choice of powerful laser probes and laser clusters



### ELECTROTHERAPY + LASER

#### BTL-4825 L COMBI TOPLINE

- ◇ 2-channel **Electrotherapy**
- ◇ Extended range of waveforms
- ◇ **Laser** with a choice of powerful laser probes and laser clusters



### ELECTROTHERAPY + MAGNETOTHERAPY

#### BTL-4825 M2 COMBI TOPLINE

- ◇ 2-channel **Electrotherapy**
- ◇ Extended range of waveforms
- ◇ 2-channel **Magnetotherapy** with FMF (Focused Magnetic Field) Technology™



### LASER + MAGNETOTHERAPY

#### BTL-4800 LM2 COMBI TOPLINE

- ◇ **Laser** with a choice of powerful laser probes and laser clusters
- ◇ 2-channel **Magnetotherapy** with FMF (Focused Magnetic Field) Technology™





OVERVIEW OF THE BTL-4000 MODELS

		Electrotherapy channels	4-pole electrotherapy channels	Ultrasound therapy channels	Laser therapy channels	Magnetotherapy channels	All therapeutic channels	Ordering No.	Electrotherapy waveforms identical to: (see pages 40-41)	
Combi therapy	BTL-4810 S Professional	1	-	1	-	-	2	P4810.004V100	BTL-4610 Professional	
	BTL-4816 S Professional	-	1	1	-	-	2	P4816.004V100	BTL-4620 Professional	
	BTL-4818 S Professional	-	1	1	-	-	2	P4818.004V100	BTL-4625 Professional	
	BTL-4820 S Topline	2	-	1	-	-	3	P4820.301V100	BTL-4620 Topline	
	BTL-4825 S Topline	2	-	1	-	-	3	P4825.301V100	BTL-4625 Topline	
	BTL-4800 SL Topline	-	-	1	1	-	2	P4800.302V100		
	BTL-4825 L Topline	2	-	-	1	-	3	P4825.302V100	BTL-4625 Topline	
	BTL-4825 M2 Topline	2	-	-	-	2	4	P4825.303V100	BTL-4625 Topline	
	BTL-4800 LM2 Topline	-	-	-	1	2	3	P4800.314V100		
Single therapy	Electrotherapy – Puls	BTL-4610 Professional	1	-	-	-	-	1	P4610.002V100	-
		BTL-4620 Professional	2	-	-	-	-	2	P4620.002V100	-
		BTL-4625 Professional	2	-	-	-	-	2	P4625.002V100	-
		BTL-4610 Topline	1	-	-	-	-	1	P4610.003V100	-
		BTL-4620 Topline	2	-	-	-	-	2	P4620.003V100	-
		BTL-4625 Topline	2	-	-	-	-	2	P4625.003V100	-
	Ultrasound – Sono	BTL-4710 Professional	-	-	1	-	-	1	P4710.002V100	-
		BTL-4710 Topline	-	-	1	-	-	1	P4710.003V100	-
	Laser	BTL-4110 Professional	-	-	-	1	-	1	P4110.002V100	-
		BTL-4110 Topline	-	-	-	1	-	1	P4110.003V100	-
	Magnet	BTL-4920 Professional	-	-	-	-	2	2	P4920.002V100	-
		BTL-4920 Topline	-	-	-	-	2	2	P4920.302V100	-

Electrotherapy currents

**BTL-4610 Professional, BTL-4620 Professional, BTL-4610 Topline, BTL-4620 Topline, BTL-4810 S Combi Professional, BTL-4816 S Combi Professional, BTL-4820 S Topline:**

Galvanic, Diadynamic, Programmable sequences, Traebert, Faradic, Neofaradic, Russian stimulation, Stimulation pulses, Rectangular pulses, TENS (sym, asym, alt), 2-pole interference, 4-pole interference (except BTL-4610 Professional, BTL-4610 Topline, BTL-4810 S Combi Professional), Triangular pulses, Exponential pulses, Exponential pulses with rise, Combined pulses

**BTL-4625 Professional, BTL-4625 Topline, BTL-4818 S Professional, BTL-4825 S Topline, BTL-4825 L Topline, BTL-4825 M2 Topline :**

Galvanic, Diadynamic, Programmable sequences, Traebert, Faradic, Neofaradic, Russian stimulation, Stimulation pulses, Rectangular pulses, TENS (sym, asym, alt), 2-pole interference, 4-pole interference, Triangular pulses, Exponential pulses, Exponential pulses with rise, Combined pulses, Isoplanar field, Dipole vector (manual and automatic), Interrupted pulses, Leduc current, H-wave, Microcurrents, Medium frequency surges, Spastic currents, Electrodiagnostics

High Volt therapy (HVT) option

HVT is possible for: BTL-4610 Professional, BTL-4610 Topline

# BTL-6000

THE BTL PRESSO-THERAPY SYSTEM COMBINES MODERN, EYE-CATCHING DESIGN WITH OUTSTANDING PARAMETERS.



## LYMPH DRAINAGE

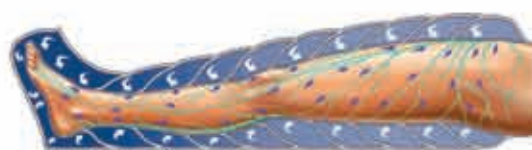
### TECHNOLOGY

The human lymphatic system is responsible for removing interstitial fluid from tissues. It absorbs and transports fatty acids and fats throughout the circulatory system and transports antigen-presenting cells to the lymph nodes where the immune response is stimulated. Diseases and problems of the lymphatic system usually cause swelling and other symptoms.

BTL's Lymphastim works on the pneumatic presso-therapy principle. Special applicator sleeves with multiple overlapping chambers provide a gentle massage that encourages the natural circulation of the lymph through the body. The effect is similar to the manual lymph drainage given by a massage therapist's hands.

### DIFFERENT FIELDS OF APPLICATION

- ◇ Rehabilitation and sports medicine
- ◇ Lymphology and rheumatology clinics
- ◇ Spas, wellness hotels and aesthetic/beauty centers



### LYMPH DRAINAGE ADVANTAGES

- ◇ Well-established & clinically-proven therapeutic method
- ◇ Immediate, visible results
- ◇ The treatment is well-received by patients
- ◇ Body is not burdened with unnecessary medication

### HIGH QUALITY APPLICATORS

- ◇ **Fully overlapping sections**, without gaps, for a gentler and more effective movement of lymphatic fluids
- ◇ Extremely **abrasion resistant** polyamide material provides a unique combination of light-weight and durability
- ◇ **Antibacterial and dirt-repellent** material specially designed for use in a medical environment
- ◇ Ergonomically designed for maximum comfort
- ◇ Connectors allow **easy applicator swapping**. Just plug in and treat.
- ◇ System has **automatic identification of the applicators**; the unit automatically recognizes which applicator is connected to it and then chooses the right compression flow
- ◇ Full-length, high quality zipper for quick and easy dressing / undressing
- ◇ Automatic sleeve emptying after treatment for comfortable handling

#### Available applicators:

- ◇ Trousers 22 chambers / Trousers 11 chambers



- ◇ Leg 10 chambers / Leg 5 chambers



- ◇ Arm 8 chambers / Arm 6 chambers



## BTL-6000 LYMPHASTIM TOPLINE

### Unrivalled professional 12-channel presso-therapy device

- ◇ User-friendly interface with **colour touch-screen**
- ◇ **26 pre-set therapy protocols** and sequences of programmes. Protocols include unique pre-treatment programmes for opening of lymphatic nodes based on the principle of manual lymph drainage.
- ◇ 15 programmes for various compression flow
- ◇ **Built-in encyclopaedia** with treatment recommendations
- ◇ Memory for up to 100 user-defined programmes
  
- ◇ **Advanced settings** for customized treatment include:
  - Individually adjustable pressure for each chamber
  - Working chamber activity shown on display
  - Option to disable one or more chambers where the patient cannot tolerate the pressure
  - Advanced settings of pressure gradient



## BTL-6000 LYMPHASTIM EASY

### 12-channel / 6-channel economy models with LED interface

- ◇ **Eight pre-set programmes** that can be modified by the user
- ◇ Basic pressure gradient and programme speed setting
- ◇ Pressure can be changed during the course of therapy
- ◇ Working chamber activity shown on bar graph



## MEDICAL EFFECTS

Lymphatic drainage unblocks lymphatic ducts and vessels. This causes the natural flow of the lymph from the peripheral parts of the body, thus it reduces swelling and pain caused by the excessive amount of the lymph and metabolites in the limbs.

Lymphastim application also helps by healing and regenerating muscle tissue, increasing skin tone and restoring the original elasticity of the skin.

## MOST COMMON INDICATIONS

### Medical

Chronic oedemas  
 Post-surgical obstruction of lymph vessels  
 Varices prevention and treatment  
 Venous insufficiency and ischemic diseases

### Wellness and aesthetics

Cellulite  
 Postliposuction care  
 Regeneration and detoxification  
 Heavy-legs syndrome

## TECHNICAL PARAMETERS



**BTL-6000**  
**Lymphastim 12 TOPLINE**

**BTL-6000**  
**Lymphastim 12 EASY**

**BTL-6000**  
**Lymphastim 6 EASY**

Ordering Number	P6000.003v100	P6000.002v100	P6000.001v100
User-interface	5.7" colour touch-screen	LED numbers	LED numbers
BTL Encyclopaedia	26 clinical protocols (programmes in sequences)		
User Programmes	100 user-defined programmes		
Pre-set Programmes	15	8	8
Number of Channels	12	12	6
Pressure Setting	20 -160 mmHg	20 -160 mmHg	20 -160 mmHg
Gradient	0 -100% continuous setting	0, 10, 20, 30%	0, 10, 20, 30%
Standard Accessories	Basic tube 12 TOPLINE, 1x power cord & touch-screen pen pointer	Basic tube 12 EASY & 1x power cord	Basic tube 6 EASY & 1x power cord
Optional Accessories	Trousers 22 chambers 2x leg + belt 2 chambers	Trousers 22 chambers 2x leg + belt 2 chambers	Trousers 11 chambers 2x leg + belt 1 chamber
	Leg 10 chambers	Leg 10 chambers	Leg 5 chambers
	Arm 8 chambers	Arm 8 chambers	Arm 6 chambers
	Interface for 2 arms or 2 legs: For using 2 arm or 2 leg applicators together		
Extension strips (10 cm): For enlarging the circumference of the applicator			
Trolley			



### THE SHORTWAVE THERAPY BTL-20

The BTL-20 shortwave diathermy is a microprocessor-controlled unit for continuous and pulsed applications. Direction-adjustable arms enable comfortable treatment of each body part, and a wide range of applicators assures maximum therapeutic effect. The unit is equipped with the timer that automatically ends the therapy after the pre-set time has elapsed.

#### Main features

- ◇ High performance solid-state generator
- ◇ Continuous and pulsed mode (allows thermal and a-thermal treatment)
- ◇ Capacitive and inductive applicators
- ◇ High output power, continuously adjustable
- ◇ Easy changing of applicators
- ◇ Built-in timer with automatic shut-off

#### Available applicators

- ◇ Coil field applicators – for treatment of deep body parts and muscles
- ◇ Condenser field applicators (Schliephake) – for heating fat and muscle tissue
- ◇ Soft-rubber plate applicator



#### Technical specifications

Ordering No.	P313.000V100
Voltage	230 V
Frequency	27.12 MHz
Max. output power in cont. mode	200 W
Max. output power in pulsed mode	400 W – peak
Pulse frequency	70–350 Hz
Timer	max. 30 min.
Dimensions	850 × 380 × 380 mm
Weight	40 kg
Standard accessories	power cord

Optional accessories: see page 62

**THE MICROWAVE THERAPY BTL-21**

The BTL-21 microwave diathermy unit is microprocessor-controlled unit for continuous and pulsed applications. It is suitable for use in out-patient clinics, hospitals, and other facilities. The four joint arms enable comfortable treatment of each body part, and a wide range of applicators assures maximum therapeutic effect. The unit is equipped with the timer that automatically ends the therapy after the pre-set time has elapsed.

**Main features**

- ◇ High performance solid-state generator
- ◇ Continuous and pulsed mode (allows thermal and a-thermal treatment)
- ◇ High output power, continuously adjustable
- ◇ Easy changing of applicators
- ◇ Built-in timer with automatic shut-off

**Examples of microwave application**

- ◇ Thermal treatment
- ◇ Myorelaxation and spasmolytic effect
- ◇ Improvement of fibrous tissue elasticity (contractures)
- ◇ Resorptive effect in case of chronic, inflammatory and post-traumatic infiltrations, edemas and haematomas
- ◇ Analgesic effect in connection with myorelaxation and improvement of blood circulation
- ◇ Improvement of enzyme circulation and cell metabolism

**Available applicators**

- ◇ Hollow
- ◇ Long field
- ◇ Round field
- ◇ Contact radiators
- ◇ Body cavity radiators



**Technical specifications**

Ordering No.	P313.050V100
Voltage	230 V
Frequency	2450 +/- 50 MHz
Max. output power in cont. mode	250, 50, 10 W
Max. output power in pulsed mode	1600 W – peak
Timer digital	max. 30 min.
Dimensions	850 × 380 × 380 mm
Weight	40 kg
Standard accessories	power cord

Optional accessories: see page 62



**BTL-16 PLUS**

The BTL-16 Plus is a microprocessor-controlled traction device suitable for continuous, intermittent, harmonized cervical and lumbar therapy. The unit has four digital displays and digital interface for easy setting of therapy parameters. It can be used with the traction couches BTL-1100 Trac and BTL-1300 Trac.

**Main features include:**

- ◇ User-friendly digital interface
- ◇ Continuous, intermittent and harmonized traction programmes
- ◇ User-defined hold, rest and treatment times
- ◇ Intermittent and progressive settings
- ◇ Real-time digital treatment tracking
- ◇ Built-in safety features
  - patient interrupt switch
  - audible signal at the end of the treatment
  - audible signal if the patient interrupt switch is activated
- ◇ Ergonomic design

**Technical parameters and accessories for the BTL-16 Plus**

Ordering No.	P616.000v100
Therapy	continuous, intermittent, harmonized, progressive
Traction force	0–92 kg
Force time/ Rest time (intermittent therapy)	0–99 s
Treatment time	0–99 min
Mains supply	110–120V/220–240V 50Hz/60Hz 1,2A/0,6A
Dimensions W × H × L	295 × 270 × 360 mm
Weight	13,6 kg
Standard accessories	patient interrupt switch, nylon traction cord with metal fitting, cervical harness with spreader bar

Optional accessories: see page 62

**ACCESSORIES FOR THE BTL-16 PLUS**



Patient interrupt switch  
Ord. No. P616.003v100



Cervical harness with spreader bar  
Ord. No. P616.001v100



Stool with adjustable height  
Ord. No. T010.028v100



Thoracic and pelvic traction belts with adjustable fixation straps  
Ord. No. P703.000v100

## BTL Electrotherapy

P5600.007	Electrode 70 × 50 mm 1 pc. for BTL-4000/5000 – 2 mm input
P5600.008	Electrode 120 × 80 mm 1 pc. for BTL-4000/5000 – 2 mm input
P006.014V101	Sponge cover 55 × 70 mm, blue, for electrodes 6 × 4, 7 × 5
P006.016V101	Sponge cover 125 × 105 mm, blue, for electrodes 12 × 8
P5600.022V100	Fixation straps for electrodes
P5600.010	Bipolar vaginal electrode
P5600.011	Bipolar rectal electrode
P5600.001V102	Patient cable for electrotherapy BTL-4000 Topline/Professional/5000
P5600.002V102	Dual patient cable for electrotherapy BTL-4000 Topline/Professional, BTL-5000; with blue LEDs
P5600.003V100	1 pair of electrode connection cables for electrotherapy BTL-4000 Topline/Professional/5000, light grey, 1.2 m
P5600.004V100	1 pair of electrode connection cables for electrotherapy BTL-4000 Topline/Professional/5000, dark grey, 1.2 m
P5600.013V100	Holder for point electrode for BTL-4000/5000
P5600.014	Ball point attachment for BTL-4000/5000 – 2 mm in diameter
P5600.015	Ball point attachment for BTL-4000/5000 – 6 mm in diameter
P5000.003V100	Signal interface cable 1 m for connection of BTL electrotherapy units (4000 Topline/Professional/5000) to BTL Vac and BTL ultrasound therapy units (4000 Topline/Professional/5000)

## BTL ultrasound therapy

P5700.001V110	Multi-frequency head 1 cm <sup>2</sup> for BTL-4000/5000
P5000.003V100	Signal interface cable 1 m for connection of BTL electrotherapy units (4000 Topline/Professional/5000) to BTL Vac and BTL ultrasound therapy units (4000 Topline/Professional/5000)
P007.010V102	Ultrasound gel 0.3 l
P007.011V101	Ultrasound gel 1 l

## BTL VAC

PVAC.053	Suction cup electrode 30 mm for BTL Vac
P012.006	Suction cup electrode 65 mm for BTL Vac
P012.005	Suction cup electrode 95 mm for BTL Vac
PVAC.052	Sponge for electrode 30 mm for BTL Vac
P012.008	Sponge for electrode 65 mm for BTL Vac
P012.007	Sponge for electrode 95 mm for BTL Vac
PVAC.050	Patient cable for BTL Vac, white and red plugs, grey cable
PVAC.051	Patient cable for BTL Vac, white and red plugs, white cable
P012.052	Patient cable for BTL Vac, BTL-12, white plugs, white cable
P012.051	Patient cable for BTL Vac, BTL-12, red plugs, white cable
PVAC.054V100	Water tank for BTL Vac

## BTL Laser therapy

L445.003V100	Red cluster	685 nm/200 mW (4 × 50) Laser + 470 nm/200 mW (13 × 16) LED blue		
L445.001V100	Infrared cluster	830 nm/800 mW (4 × 200) Laser + 470 nm/200 mW (13 × 16) LED blue		
L445.002V100	Infrared cluster	830 nm/1600 mW (4 × 400) Laser + 470 nm/200 mW (13 × 16) LED blue		
L445.004V100	Combined cluster	685 nm/200 mW (4 × 50) Laser + 830 nm/800 mW (4 × 200) Laser + 470 nm/200 mW (13 × 16) LED blue		
L445.005V100	Combined cluster	685 nm/200 mW (4 × 50) Laser + 830 nm/1600 mW (4 × 400) Laser + 470 nm/200 mW (13 × 16) LED blue		
L448.000V200	Red probe	divergent	685 nm/30 mW	
L448.020V200	Red probe	divergent	685 nm/50 mW	
L448.004V200	Infrared probe	convergent	830 nm/50 mW	green navigation
L448.005V200	Infrared probe	convergent	830 nm/100 mW	green navigation
L448.006V200	Infrared probe	convergent	830 nm/200 mW	green navigation
L448.007V200	Infrared probe	convergent	830 nm/300 mW	green navigation
L448.010V200	Infrared probe	convergent	830 nm/400 mW	green navigation
P5100.008	Safety eyewear 600–1000 nm L3, plastic			
L449.006V100	Optical attachment for dentistry			

L449.007V100	Optical attachment for ENT
L449.008V100	Optical attachment for gynaecology
L449.005V413	Holder for optical attachment (screwable)
P5100.003V100	Acupuncture set for BTL-4000/5000. Price includes: acupuncture attachment for probe, reference electrode, cable.
L445.056V100	Holder for laser cluster or laser probe
<b>BTL Magnetotherapy</b>	
P5900.001V101	Disc
P5900.002V101	Double disc
P5900.003V101	Multi disc
P5900.004V201	Linear applicator
P5900.005V101	Small solenoid 30 cm
P5900.006V101	Big solenoid 60 cm
P5900.017V100	Magnetotherapy couch
P5900.007V100	Extension cable for magnetic applicators
P5900.014V100	Belt for magnetic applicator (disc) – 60 cm
P5900.015V100	Belt for magnetic applicator (double disc) – 85 cm
P5900.016V100	Belt for magnetic applicator (multi disc) – 190 cm
<b>Modules for upgrade</b>	
PB5000.010V107	Upgrade set – one-channel electrotherapy with accessories for BTL-5000. Includes: electrotherapy generator, patient cable, 2× electrode 5 × 7 cm, 2× sponge covers, set of fixation straps, 2 pairs of connection cables – light grey, dark grey
PB5000.012V101	Upgrade set – interferential electrotherapy with accessories for BTL-5000. Includes: interferential electrotherapy generator, 2× patient cable, 4× electrode 5 × 7 cm, 4× sponge covers, set of fixation straps, 2 pairs of connection cables – light grey, dark grey
PB5000.009V152	Upgrade set – one-channel ultrasound with accessories for BTL-5000 upgradable, 56xx, 58xx. Includes: ultrasound generator, head of 5 cm <sup>2</sup> , gel 0.3 l, left and right holder of ultrasound heads
PB5000.011V104	Upgrade set – one-channel laser with accessories for BTL-5000. Includes: laser generator, door sticker, warning sticker, left and right holder of laser probe
P5600.017V102	High-voltage therapy (HVT) set for BTL-4000 Topline/Professional/5000. Price includes: HVT generator
PB5900.001V102	Upgrade set – two-channel magnetotherapy for BTL-5000. Includes: magnetotherapy generator, 2x extension cables for magnetotherapy applicators
P4000.002	Electrotherapy Plus upgrade memory module for electrotherapy channel BTL-4000. Price includes: additional types of currents.
P5000.004V100	Electrotherapy Plus upgrade memory module for electrotherapy channel BTL-5000. Price includes: electrodiagnostics, additional types of currents
<b>Accessories for BTL-5000 series</b>	
G000.099V101	Touch screen pen pointer for BTL-5000
<b>Accessories for BTL-4000 series</b>	
P4000.001V101	Adapter for BTL-4000
P4000.005V100	Carry case for BTL-4000
<b>Accessories for Lymphastim BTL-6000</b>	
P6000.052	Leg 5 chambers - left or right (1 pc)
P6000.054	Arm 6 chambers - left or right (1 pc)
P6000.051	Trousers 11 chambers - includes set of Legs 5 and 1x belt 1 chamber
P6000.053	Leg 10 chambers - left or right (1 pc)
P6000.055	Arm 8 chambers - left or right (1 pc)
P6000.050	Trousers 22 chambers - includes set of Legs 10 and 1x belt 2 chambers
P6000.057	Extension strip 10 cm (1pc)
P5002.009v110	Trolley for BTL-5000, BTL-6000 Lymphastim
P6000.211v100	Compact trolley for BTL-6000 Lymphastim
P6000.034v100	Interface for 2 arms or 2 legs

## Accessories for shortwave therapy BTL-20

P313.002V100	Basic accessories for coil field application consisting of 1 four-joint holding arm, 1 coil applicator, diameter 14 cm, 1 special coil field cable
P313.001V100	Basic accessories for condenser field application consisting of 2 four-joint holding arms, 2 condenser applicators, diameter 13 cm, 2 cables for condenser applicator
P313.003V100	Plate applicator set A consisting of 2 soft-rubber plate applicators, 8 × 14 cm, with flexible cables, 4 felt spacers, 2 cloth coatings, 2 perforated rubber bands with buttons
P313.004V100	Plate applicator set B consisting of 2 soft-rubber plate applicators, 12 × 18 cm, with flexible cables, 4 felt spacers, 2 cloth coatings, 2 perforated rubber bands with buttons
P313.005V100	Coil applicator, diameter 8 cm, without cable
P313.006V100	Coil applicator, diameter 14 cm, without cable
P313.007V100	Coil field cable, interference eliminated, for coil applicators
P313.008V100	Coil applicator with cable, Triplode of 15 × 35 cm
P313.009V100	Condenser applicator, diameter 4.2 cm
P313.010V100	Condenser applicator, diameter 8.5 cm
P313.011V100	Condenser applicator, diameter 13 cm
P313.012V100	Soft-rubber plate applicator, 8 × 14 cm, with flexible cable
P313.013V100	Soft-rubber plate applicator 12 × 18 cm, with flexible cable
P313.014V100	Felt spacer for soft-rubber plate applicators 8 × 14 cm
P313.015V100	Felt spacer for soft-rubber plate applicators 12 × 18 cm
P313.016V100	Cloth coating for soft-rubber plate applicators 8 × 14 cm
P313.017V100	Cloth coating for soft-rubber plate applicators 12 × 18 cm
P313.018V100	Perforated rubber band with button, 3.2 × 100 cm
P313.019V100	Button for perforated rubber band
P313.020V100	Elastic velcro band, 5 × 60 cm
P313.021V100	Elastic velcro band, 5 × 120 cm
P313.022V100	Four-joint holding arm
P313.023V100	Cable for condenser applicator
P313.024V100	Neon check light

## Accessories for microwave therapy BTL-21

P313.051V100	Recommended basic accessories consisting of 1 four-joint holding arm, 1 trough-type radiator, 1 RF cable 250W
P313.053V100	Trough-type radiator
P313.054V100	Long radiator
P313.055V100	Spot radiator
P313.056V100	Contact radiator, diameter 20 mm
P313.057V100	Contact radiator, diameter 50 mm
P313.062V100	RF cable for the through type, long and spot radiators, 250 W
P313.063V100	RF cable for contact, rectal and vaginal radiators, 10 W
P313.064V100	Protection covers for rectal and vaginal radiators, 10 pcs.
P313.065V100	Protective eyewear for microwave therapy
P313.066V100	Energy indicator

## Accessories for traction therapy BTL-16 Plus

P703.000V100	Pelvic and thoracic traction belts system
T010.028V100	Stool with adjustable height for BTL-1100 Trac and BTL-1300 Trac

BTL manufactures a range of other products for medical use. For details, please ask for a separate catalogue.

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### SHOCKWAVE THERAPY

highly effective, non-invasive treatment for pain associated with musculoskeletal system



### CARDIOLOGY

1, 3, 6 and 12 channel ECGs  
computer-based ECG  
stress test system  
ECG holters  
ABPM (ambulatory blood pressure monitoring system)



### COUCHES

manually and electrically adjustable couches



### HYDROTHERAPY

whole body baths  
baths for upper and lower extremities



