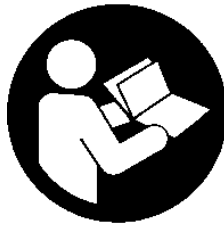


**Apparatus for personal treatment and rehabilitation
by means of a low-frequency pulsed magnetic field**

Rev. 8 - 15. 12. 2021

CE 1014



Manufactured by
2EL spol. s r.o., Na Staré Cidlině 663, 50401 Nový Bydžov, ČR

Product description

The LT-100 unit features an atypical design, where both the applicator and the generator (control unit) are integrated within one unit of a toroidal shape – a torus.

Power is supplied to the unit via a plug-in power supply adapter for medical application, which uses 100V to 240V, 50/60 Hz line voltage. Thus, the unit can be used in any country in the world.

Due to this approach, a solution was obtained for magnetic therapy with universal uses in medical and rehabilitation practice. The system generates a field with suitable biotropic parameters, contributing to a high therapeutic efficacy.

The product is based on proven technology of the LT-99 series units, including the NTS pulsed electromagnetic field generation method covered by a European patent.

In its "full version" the unit is equipped with an output for connecting an external applicator, which can be convenient for some therapeutic applications. The unit will accommodate any LT series applicator manufactured by 2EL.

The product can be used for the treatment of the diseases listed in the annex, as well as for preventing them and for strengthening the immune system and improving the body metabolism.

Owing to its toroidal shape, the system is well suited for the treatment of athletes who suffer from frequent bruises, oedema, extravasations, contusions and muscular fatigue. In injured patients the system will support the fracture/wound healing processes. The product's relaxation effect is significant as well.

Thanks to its easy portability in a special bag, the unit is ready to help its owner on trips and journeys.

Major beneficial effects of the product:

- Induces widening of the blood vessels (vasodilation) – better blood supply to the tissues
- Has anti-inflammatory effects (on both sterile and microbial inflammations)
- Acts as a painkiller (analgesic effects)
- Relieves muscle tension (myorelaxing effect)
- Speeds up healing processes
- Suppresses swelling
- Reinforces and stabilizes bone tissue
- Improves cell and tissue metabolism
- Strengthens and promotes the immune system
- As a result of all these effects, it reduces the use of drugs, speeds up the recovery process and reduces or eliminates symptoms in patients with chronic diseases

Clinically tested and proven effects for the following conditions:

- Fractures
- Oedema and inflammations
- Bruises and burns
- Post-injury condition
- Back pain
- Peripheral nerve injuries
- Metabolic disorders
- Headaches (migraines)
- Fibromyalgia
- Rheumatic diseases (arthritis, ankylosing spondylitis, arthrosis, spondyloarthrosis, gout etc.)
- Spondylosis
- Osteoporosis
- Tennis elbow, frozen arm
- Parodontosis, periostitis
- Chronic prostatitis

⚠ When should magnetotherapy be avoided?

Magnetotherapy should be avoided during pregnancy, although no clinical studies have given evidence of any unwanted effects of this treatment. This is just a precautionary measure.

In no case should the product be used by patients with any electronic implants (such as pacemakers or insulin pumps). The effects might be fatal.

Bleeding of any kind is also a condition in which magnetotherapy is not recommended because magnetic field slightly suppresses blood coagulation and promotes blood supply to the tissues, whereby bleeding is supported. Magnetotherapy is contraindicated in patients with bleeding into the digestive tract.

The use of the device should be stopped two days before, during, and two days after menstruation, although a pulsed magnetic field may help reduce menstrual pain if applied outside this time period.

Magnetotherapy is not recommended for patients with acute viral diseases, heavy fungus diseases, neurological seizures or severe atherosclerosis.

Do not use magnetotherapy in patients with adrenal hyperfunction, thyroid hyperfunction, active tuberculosis, venous thrombosis or embolism, hypothalamus or hypophysis disorders. All the above information is given as a precautionary measure.

Also as a precaution, avoid using the product to treat persons with existing or past malignant tumours, even if treated and supposedly eliminated.

Based on current knowledge, magnetotherapy does not have any side effects if the recommendations given here are followed.

In extremely sensitive individuals, use of the system can induce an appreciable temporary blood pressure drop, this response, however, usually vanishes after the first five applications.

How should the device be used and for how long?



The use of this system in patients with various diseases or disorders is described in the annex, which is provided to the user along with this manual.

The use of the system several times a day is absolutely safe; nevertheless, the total daily exposure should not exceed one hour.

Components of the LT-100 unit


1. LT-100 generator-applicator
2. FW7555 Medical plug-in adapter
3. Magnetic indicator
4. Pad (optional)


Technical data




- Model: LT-100
- Classification:  - Class II,  - Type BF
- Power supply:
FW7555M/12 plug-in power supply adapter (100 – 240V/12V=)
- Generator input current in the idle state: Maximum 50 mA
- Generator power demand: Maximum 25 VA
- Output for external applicators A1C, A4C, ASE, APE and B1C
- Magnetic induction on the surface of the integrated applicator:
3.5 mT
- Magnetic induction on the surface of external applicators:
2 to 10 mT
- Pulse frequency:
1.3 to 72.7 Hz (depending on the operating mode selected)
- Admissible operating temperature range: 0°C to 40°C
- Admissible storage temperature range: -20°C to 65°C
- Torus size: Maximum 400 x 350 x 30 mm
- Weight, adapter included: 870 g


Operating modes (programmes)


The unit can be operated in three different modes, determined by the programme selected: **P1**, **P2** or **P3**.


In the **P1** programme mode the unit generates a pulsed magnetic field with a pulse frequency varying between 3.3 and 40.7 Hz. This mode is indicated by the symbol  (*Wobbling-sWeeping*) in the upper left segment of the display.

In the **P2** programme mode the unit generates a pulsed magnetic field at a random pulse frequency within the range of 1.3 to 72.7 Hz. This mode is indicated by the symbol  (*Random*) in the upper left segment of the display.

In the **P3** programme mode the unit generates a pulsed magnetic field at a single (preset) pulse frequency. The default frequency (preset by the manufacturer) is 12 Hz. This default frequency can vary from 2 Hz to 72 Hz during operation of the unit. This mode is indicated by the symbol  (*Single frequency*) in the upper left segment of the display. The **P3** mode offers the option to change the selected frequency by ± 2.5 Hz. This can be achieved by simultaneous activation of the symbols  and  by a procedure which will be described later.




In each of the modes, NTS modulation is activated by default. This is indicated by the symbol  (*Modulation*) in the upper left segment of the display. NTS is a patented technology that eliminates the body's tendency to become accustomed to the pulsed magnetic field and thus to benefit from the effects of the device to a lesser and lesser extent. The NTS function is very important for stimulation of the immune system, where the pulsed magnetic field is to be applied for a long time. NTS modulation can be disabled and enabled by a procedure that will be described later.

The  symbol in the upper right segment of the display indicates that each five-minute period of running the unit is signalled acoustically; a signal also announces the end of the application. This function can be disabled and enabled in each of the modes described.

The  symbol (musical note) in the upper right segment of the display indicates that a system sound is allowed.



The default setting (preset by the manufacturer) includes the full power of the unit and a 20-minute application period. The levels, though, can be modified in each of the programmes.

How to set up and control the unit


The plug-in adapter should only be used in dry, indoor conditions. First, connect your Torus LT-100 to the power adapter: To do so, plug the adapter cable connector into the socket in the centre of the unit's control panel. Now, place the adapter plug in the wall socket. If the wall socket is connected to the grid and the interconnection between the adapter and the unit is all right, the green control light on the control panel and LCD display will illuminate. The unit is in its initial standby state. The display shows the text *PROG* and the letter **P** followed by the programme number. If you want to use a different programme, select it by pressing the double push-button in the point of the  symbol or the  symbol. To start the selected programme, briefly press the button with the symbol .

During operation of the unit, the display shows the time (*TIME*) in minutes (*min*) remaining until the end of the application. The undulating curves in the bottom left corner of the display and the yellow flashing control on the control panel indicate that the instrument is generating a pulsed magnetic field. The presence of the magnetic field can be tested by holding the Magnetic Indicator, that is supplied with the unit, vertically above the surface of the applicator part of the unit. If you feel perceptible vibrations, the device is working correctly.


If the unit has been allowed to reach the end of cycle, a triple acoustic signal will be heard (unless disabled) and the **EA** (*End of Application*) message will appear on the display. Press any button to put the unit in standby.

The default pulse repetition frequency in the **P3** programme mode is 12 Hz. This frequency, however, can be changed smoothly by the user while the unit is running. To do so, briefly press the double push-button on the side of the  or  symbol. The display will show the text *FREQ* and the current frequency in

Hz. Now, either press this button briefly in a sequence or press and hold it in order to initiate a stepless frequency change. Release the button after attaining the desired frequency. In two seconds, the time remaining until the end of the application will be displayed again.

Whenever you wish to suspend the application, press the  button briefly. Use the same button to resume the application. The idle suspension state differs from the initial standby state (which is the state in which the unit occurs either on connecting the unit to power or after reaching the end of application) in that the **P** programme indication is completed with the word *PAUSE* in the bottom segment of the display and the green control on the unit control panel is flashing. The programme number can be changed in this idle state. However, be aware that this new programme will be set to the standard time of 20 minutes again (or to the time preset by you).






After the unit has been idle for more than 10 minutes, the LCD display illumination and the display itself will switch off automatically. Pressing any button will illuminate it again and the previous status will be displayed.





If you hear a triple acoustic signal when pressing the , you are informed that no function can be set with that double push-button in the current condition or with the current setting of the unit.


The unit is equipped with an electronic memory owing to which the programme that was run last before switching off the unit will be automatically set on starting the unit again.

User-defined setup

The following parameters can be controlled in the three programme modes, **P1**, **P2** and **P3**: NTS modulation enabled/disabled, sound enabled/disabled, and intensity and application time setting. Frequency sweep can also be enabled in the **P3** programme mode.


Select the programme in the standby state. Now, press and hold the  button and briefly press the double push-button at . In this manner, the programme setup mode is activated. The display will show the word *SETUP* and a flashing parameter which can be changed using the  or  button. Press the  button briefly to pass to the next parameter.



For instance, if the  symbol is flashing, this parameter can be set to **0** (modulation disabled) or **1** (modulation enabled) using the  or  button. Press  briefly to pass to the next parameter.







If the  symbol is flashing, apply the same procedure to set this parameter to **0** (sound disabled) or **1** (sound enabled).




In the next step, the intensity of the magnetic field can be adjusted to 20%, 40%, 60%, 80% or 100% by setting the *INTEN* parameter to **0.2**, **0.4**, **0.6**, **0.8** or **1.0**. The intensity set is indicated by the number of curves (1 to 5) displayed in the bottom left corner of the display.

Set the *TIME* parameter (in minutes) to select the time of application (exposure) within the range of 5 to 60 minutes at 5-minute measures.



In addition, a pulse frequency sweep of 5 Hz (± 2.5 Hz from the frequency set) can be selected in the **P3** programme mode. Set the  parameter to **0** to disable the sweep or to **1** to enable the sweep.

The setup mode can be exited at any time by pressing and holding the  button and subsequently pressing the double push-button at  briefly. The unit passes to idle mode with the setup accepted.

The unit can be switched to the single-programme mode where the functions of the  double push-button are disabled and only the  button serves to control the unit. First select the desired programme and then press and hold the  button until an acoustic signal is heard (about 10 seconds) and the  symbol (crossed arrow) appears above the programme number in the upper part of the display. This symbol indicates that only the selected programme can be run. To switch back, return to the idle state, and hold the  button down until the  symbol disappears.

To disable any sound (including pressing the button), bring up the  symbol (crossed-out musical note) in the upper right corner of the display. To achieve this (in the idle state of the unit), press and hold the  button and then briefly press the double push-button at . Apply the same procedure to enable the sound again.

The complete setup of the unit remains stored in the system memory even after unplugging the unit/adaptor. Thus, the setup procedure need not be repeated after switching the unit on again.

The unit should be delivered to the user in the default setup state defined by the manufacturer. To reset the unit to the default setup, unplug the unit, press and hold  and subsequently connect the unit to power via the adaptor. After releasing the  button the system will be in the default state.

Attachment of an external applicator

The unit (in its full version) is fitted with an output for connecting LT series applicators that are used with the LT-99 system.

To gain access to this output, remove the plastic connector cover from the unit's control panel.

If an external applicator is attached, the programme selection is automatically extended to 9 programmes. The basic *P1*, *P2* and *P3* programme choice remains intact. When any of these programmes is selected, a field of the same frequency is generated in the unit's internal applicator and in the external applicator. By contrast, if a programme from the extended range (higher than *P3*) is selected, all variations of programmes *P1* through *P3* can be set consecutively. In other words, the internal and external applicators will work in different modes. For instance, the **1.2** mode in the extended range means that the internal applicator is controlled by the *P1* programme, whereas the external applicator runs under the *P2* programme. It will be clear from this example that the left digit refers to the internal applicator, whereas the right digit refers to the external applicator.

Error signals and messages

If the green control light on the universal power supply adaptor stops shining, the unit is overloaded. In this case, unplug the adaptor immediately.

The **AF** (*Applicator Fault*) message on the display in combination with the word *FAILURE* indicates a short circuit in the internal or external applicator. If this message persists after disconnecting the external applicator, the short circuit is in the internal coil of the system.

OF (*Output Fault*) is a message that can appear if a fault occurs in the generator electronics output or if the unit is exposed to extremely intense external interferences. In this case, unplug the unit immediately.

Product properties and handling

The body of the unit is made of ABS copolymer, which meets the requirements for contact with the patient's skin.


The external applicators act on the treated body parts through clothing; do not apply them to bare skin. If application to the clothing is impossible for any reason, put a piece of cloth on the site to be treated.


No hazardous substances are contained in the product or used by the product during operation.


The apparatus is declared by the manufacturer as an active non-invasive medical device Class IIa.


When the service life has expired or the product is no longer usable, it should be handled as electric waste, i.e. either returned to the manufacturer/dealer for disposal free of charge or collected as special waste in compliance with applicable legislation.

WARNINGS:

 Unplug the unit by disconnecting the adaptor plug from the wall socket, not by disconnecting the power supply connector from the unit's panel.

 The wall socket to which the power supply adaptor is connected should be accessible at all times to enable the unit to be unplugged at any moment.

 The output connector on the control panel must be covered with the dedicated plastic cap at all times except when an external applicator is connected to the unit. In this manner, the electronics of the unit are protected from electrostatic discharge.

 Do not connect an external applicator to the unit or disconnect it from the unit while the unit is running. Connect/disconnect an external applicator before starting the unit or while operation is suspended (*PAUSE*). Otherwise, the output circuits of the system could be damaged.

⚠ The product meets the requirements for electromagnetic compatibility. Nevertheless, it can cause radio interference or affect the operation of electronic instruments in its vicinity. This can be mitigated by suitable separation of the instruments or by shielding them.

⚠ Remember that the system forms a magnetic field of one polarity and very low frequency, which can (similarly to a permanent magnet) affect some instruments and facilities located in the immediate vicinity (such as computer monitors and TV screens, classical watches, bank cards with magnetic strips etc.).

⚠ Put the system out of operation only by unplugging the power supply adapter from the wall socket.

Maintenance and repair

The system does not require any special maintenance (such as aligning, calibration, battery replacement etc.). You can make a tentative performance test by using the magnetic indicator supplied with the product.

Clean the torus with a cloth wet in water and detergent. Use vacuum cleaning or brushing to clean the external applicators. The unit components must not be submerged in water for cleaning.

Make sure that the adapter cable with the plug is well connected to the adapter body. Also, be careful not to damage the power supply adapter (e.g. by dropping it on the floor). If the adapter has suffered mechanical damage, do not use it. Instead, obtain a new adapter of the same type from your dealer.

Report any product failure to your dealer's servicing department.

Warranty

The warranty only covers workmanship and material defects. The warranty on quality, good function and manufacturing is only valid provided that the product has been used in accordance with the recommendations given in this manual.

The warranty does not apply to defects caused by mechanical damage, transportation, improper operation, inappropriate external conditions or if dismantled by an unauthorized person.

Neither the manufacturer nor the dealer will be liable for any damage due to improper use of the product. To make any warranty claim, contact your dealer.

Product: **Torus unit Type LT-100** + plug-in adapter **FW7555M**

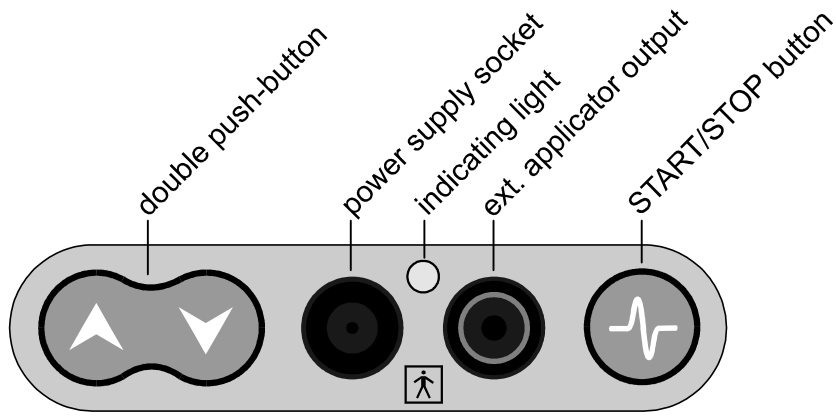
with the applicator: _____

Warranty period: _____ *from the date of sale*

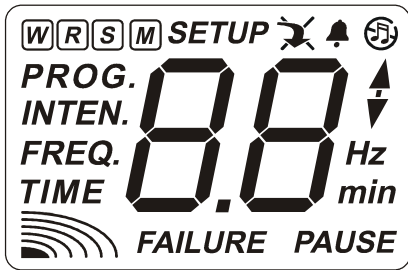
Seller: _____

Date of purchase: _____

Unit's control panel
(full version)



Display layout



- W – wobbling frequency
- R – random frequency
- S – single preset frequency
- M – modulation NTS

Specification of intended use

Description of the medical device (ZP):

Device for low-frequency pulsed magnetotherapy, designed primarily for personal care.

Medical purpose - indications:

Treatment and alleviation of diseases, their prevention, medical rehabilitation.

Patient population:

- 1) age: at least 15 years
- 2) height: does not matter
- 3) weight: does not matter
- 4) health: see contraindications in these operating instructions
- 5) patient status: a) the patient is a user: mentally able, including the ability to recognize contraindications, understood these instructions for use and its appendix or the doctor's recommendation.
b) the patient is not a user: is not important

Exposure:

Body parts according to the diagnosis, application of attachments over clothing or a textile drape.

Designated user:

Age at least 15 years, ability to understand the instructions, slight impairment of vision, listening and memory do not matter, ability to manipulate the device.

Conditions of use:

Environment: use in a dry indoor environment, visibility does not depend on lighting (display with backlight), viewing distance of the display 30 to 50 cm, perpendicular view angle $\pm 30^\circ$, operating temperature range 0 to 35 °C.

Frequency of use: typical for personal treatment 3x20 minutes a day

Portability: a handheld device with a limited distance depending on the power supply

Operating principles:

Generation of low-frequency pulsed electromagnetic field to influence the biochemical and biophysical reaction in cells and between cells of a living organism. Improving the permeability of cell membranes, which is disrupted by the disease.

The operator or responsible organization should contact the manufacturer or the manufacturer's representative:

- to assist, if necessary, in the installation and adjustment, use or maintenance of the device
- for unexpected traffic or event reports

The estimated lifespan of the device and the accessories supplied with the device is 10 years.

The device must be installed and commissioned in accordance with the information provided in the accompanying documentation.

The device requires special precautions regarding electromagnetic compatibility (EMC), which must be installed and commissioned in accordance with the EMC information given in Tables 1 to 3 at the end of these operating instructions.

Wireless communication equipment, such as wireless home networks, cell phones, cordless phones, and their base stations and portable radios, may affect this device and should be located at least at a distance from this device according to Table 3.

Tables.

Instructions and manufacturer's declaration - electromagnetic radiation		
The LT-100 is intended for use in the electromagnetic environment specified below. The customer or user should ensure that it is used in such an environment.		
Radiation test	Conformity	Electromagnetic radiation - instructions
High frequency radiation CISPR 11	Group 1	The LT-100 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
High frequency radiation CISPR 11	Class B	LT-100 is suitable for use in all institutions, including households and those buildings that are directly connected to the public low-voltage power supply network that supplies buildings used for residential purposes.
Harmonic radiation IEC 61000-3-2	Class A	
Voltage fluctuations / flickering radiation IEC 61000-3-3	complies	

Table 1

Instructions and manufacturer's declaration - electromagnetic immunity			
The LT-100 is intended for use in the electromagnetic environment specified below. The customer or user should ensure that it is used in such an environment.			
Endurance test	Test level according to IEC 60601	Satisfactory level	Electromagnetic environment - instructions
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV for contact ±8 kV for air ±15 kV for air	±6 kV for contact ±8 kV for air ±15 kV for air	Floors must be wooden, concrete or ceramic tiles. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Fast electrical transient / group of pulses IEC 61000-4-4	±2 kV for power lines	±2 kV for power lines	The quality of the power supply network should be that typical of a commercial or hospital environment.
Shock pulse IEC 61000-4-5	±1 kV between lines ±2 kV between lines and ground	±1 kV in differential mode ±2 kV for in-phase mode	The quality of the power supply network should be that typical of a commercial or hospital environment.
Short-term voltage drop, short interruptions and slow voltage changes on the supply input line IEC 61000-4-44	<5% U_t (>95% short-term decline U_t) for 0.5 cycle 40% U_t (60% short-term decline U_t) for 5 cycles	<5% U_t (>95% short-term decline U_t) for 0.5 cycle 40% U_t (60% short-term decline U_t) for 5 cycles	The quality of the power supply network should be that typical of a commercial or hospital environment. If the LT-100 user requires continuous operation during a power outage, it is

	70% U_t (>30% short-term decline U_t) for 25 cycles <5% U_t (>95% short-term decline U_t) for 5 s	70% U_t (>30% short-term decline U_t) for 25 cycles <5% U_t (>95% short-term decline U_t) for 5 s	recommended that it be powered from a continuous power supply.
Mains frequency magnetic field. (50/60 Hz) IEC 61000-4-8	3 A/m	3 A/m	The magnetic fields of the mains frequency should be at the levels of a typical typical location in a typical commercial or hospital environment.
IEC 61000-4-39	90 kHz, 8 A/m, CW modulation 134 kHz, 65A/m, PM 2.1kHz modulation 13.56 MHz, 7.5 A/m, PM 50 kHz modulation		Separation distance should be at least 0.15m
NOTE U_t is the AC mains voltage before the test level is applied.			

Table 2

Instructions and manufacturer's declaration - electromagnetic immunity			
<i>The LT-100 is intended for use in the electromagnetic environment specified below. The customer or user should ensure that it is used in such an environment</i>			
<i>Endurance test</i>	<i>Test level according to IEC 60601</i>	<i>Satisfactory level</i>	<i>Electromagnetic environment - instructions</i>
<i>Conducted high frequency IEC 61000-4-6 Radiated high frequency IEC 61000-4-3</i>	<i>3 V_{rms} 150 kHz až 80 MHz 3 V/m 80 MHz až 2,5 GHz</i>	<i>3 V_{rms} 3 V/m</i>	<i>Portable and mobile RF communications equipment should not be used closer to any part of the LT-100, including cables, than the recommended separation distance calculated from an equation appropriate for the transmitter frequency. Recommended separation distance $d=1,2\sqrt{P}$ $d=1,2\sqrt{P}$ 80 MHz až 800 MHz $d=2,3\sqrt{P}$ 800 MHz až 2,5 GHz Where P is the nominal maximum output power of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m) The field strengths from fixed radio frequency transmitters, determined by an overview of the electromagnetic characteristics of the site ^a,</i>


			<p>shall be less than the appropriate level^b in each frequency range.</p> <p>Interference may occur in the vicinity of the device marked with the following mark.</p> 
<p>NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies</p> <p>NOTE 2 This guide may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from buildings, objects and people.</p>			
<p>^a Field strengths from fixed transmitters, such as base stations for radio (cellular / cordless) telephones and terrestrial mobile and amateur radio stations, for AM and FM radio and television broadcasts, cannot be accurately predicted theoretically. An overview of the electromagnetic characteristics at the site should be taken into account to assess the electromagnetic environment for permanent high frequency transmitters. If the measured field strength in the location in which the LT-100 is used exceeds the applicable RF frequency level above, the LT-100 should be observed to verify normal operation. If abnormal properties are observed, additional measures such as reorientation or relocation may be necessary.</p> <p>^b In the entire frequency range from 150 kHz to 80 MHz, the field strength should be less than 3 V / m.</p>			

Table 3

NOTE:

2EL's MGT devices user guide – appendix

REHABILITATION				
Indication	Frequency	Exposure time	Time sched.	Note
Osteoarthritis (knee & hip joints), other joints	19 - 25 Hz or P1	2 x 20 min	15 days	Place the A4C or B1C applicator over both the joints
Ankylosing spondylitis	The first three exposures up to 10Hz, then 12 - 18 Hz	1 x 20 min	15 days	A4C along the spine
„Tennis elbow“ and „frozen shoulder“	10 - 17 Hz or P1	2 x 20 min	10 – 15 days	A4C wrapped around the elbow/shoulder, A1C simultaneously to the C-spine
Posttraumatic joint's conditions	10 - 14 Hz or P1	1 or 2 x 20 min	▪)	A4C or B1C applicator put on the affected region
Complex regional pain syndrome (Sudeck syndrome incl.)	28 - 33 Hz or P1/P2	2 x 20 min	▪)	The area should be covered by A4C applicator
Heel exostosis	28 - 30 Hz or P1/P2	2 x 20 min	▪)	Step with the whole foot on the A1C or on folded A4C or put your foot into the B1C
Headaches due to cervical spine disorders	8 - 12 Hz or P1	1 x 20 min	▪)	A4C along the whole spine from the cervical to lumbar region

RHEUMATOLOGY				
Indication	Frequency	Exposure time	Time sched.	Note
Rheumatoid arthritis	10 - 19 Hz or P1	2 x 20 min	▪)	A4C applicator to the affected point(s) and then to the renal region
Big joint's swelling (posttraumatic incl.)	20 - 25 Hz or P1	1 x 20 min	▪)	Wrap the whole joint with A4C or put the B1C applicator on
Reduced movability of small hand joints	15 - 20 Hz or P1	1 or 2 x 20 min	▪)	Put both your hands on the A1C or half-folded A4C, or into the B1C close to the circle

Rheumatoid arthritis in children	10 - 14 Hz or P1	2 x 20 min	▪)	A4C applicator to the affected point(s) and then to the renal region
Myofascial syndrome	15 - 20 Hz or P1	2 x 20 min	▪)	A4C should be extended along the affected area
Fibromyalgia	P2	2 x 20 min	▪)	A4C along the spine

Note:

In rheumatic conditions we recommend to start with the lowest frequency in program 3 in order to avoid possible painful reaction to the factor applied. If no adverse effects is seen during the first 3 days you can continue with higher frequencies in step 1 or 2 Hz a day up to 25 Hz.

SURGERY – ORTHOPEDICS				
Indication	Frecuence	Exposure time	Time schedule	Note
Fresh fractures	15 - 25 Hz or P1	4 x 20 min	15 days	As soon as possible after the primary treatment. A4C should be wrapped over the zone of the fracture
Pseudoarthrosis – non-healing fracture	16 Hz (↓P3)	4 or 5x 20 min	▪)	A4C over the zone of the fracture
Acute osteomyelitis	25 - 30 Hz or P1	2 x 20 min	▪)	A4C over the zone of the osteomyelitis
Chronic osteomyelitis	10 - 16 Hz or P1	4 or 5 x 20 min	▪)	A4C over the zone of the osteomyelitis
Delayed fracture healing	10 - 25 Hz or P1	4 x 20 min	▪)	A4C over the zone of the fracture
Cacification improvement	72 Hz eventually P2	2 x 20 min	▪)	A4C over the zone of interest
Looping endoprothesis	10 - 25 Hz or P1	3 x 20 min	▪)	Place the A4C over the affected area or put the extremity through the B1C applicator

GYNECOLOGY

Indication	Frequency	Exposure time	Time schedule	Note
Small pelvis adhesions	10 - 15 Hz or P1	1 x 20 min	•)	Place the A4C perpendicularly over the lower part of the abdomen
Pains following ruptures of ovarian cysts	12 - 17 Hz or P1	1 x 20 min	•)	Place the A4C perpendicularly over the lower part of the abdomen
Endometriosis	20 - 25 Hz or P1	1 x 20 min	•)	Place the A4C perpendicularly over the lower part of the abdomen

DERMATOLOGY

Indikace	Frekvence	Exposure time	Time schedule	Note
Crural ulcers	15 - 20 Hz or P1	2 x 20 min	•)	Fold the A4C and place it over the affected zone. The bandage does not interfere with the magnetic field.
Skin itching	25 - 30 H or P1	2 x 20 min	•)	The whole surface should be covered by A4C
Psoriasis vulgaris	24 - 29 Hz or P1	1 x 20 min	•)	Place the A4C over the affected surface

NEUROLOGY

Indikace	Frekvence	Exposure time	Time schedule	Note
Low back pains	26 - 30 Hz or P1/P2	1 or 2 x 20 min	10 days minimally	A4C along the whole spine
Peripheral nerves palsies – due to surgery or trauma	8 - 12 Hz or P1	Up to 5 x 20 min	•)	Folded A4C place over the zone of the trauma
Carpal tunnel syndrome	10 - 15 Hz or P1	2 x 20 min	•)	The wrist should be placed over the A1C or folded A4C

Trigeminal neuralgia	14 - 18 Hz or P1	1 or 2 x 20 min	▪)	A1C or folded A4C put on the affected area
Facial nerve palsy	10 - 14 Hz or P1	2 or 3 x 20 min	▪)	Put the A1C or folded A4C on the face

UROLOGY

Indication	Frequency	Exposure time	Time schedule	Note
Chronic prostatitis	22 - 27 Hz or P1	1 x 20 min	24 days	Sit on the A1C, B1C or folded A4C applicator
Sexual dysfunction	15 - 18 Hz or P1	1 x 20 min	▪)	Sit on A1C, B1C or folded A4C
Enuresis nocturna, enuresis diurna	25 Hz (↓P3)	1 x 20 min	10 days	In sitting position, one field of the A4C is in the perineal region and fold the rest of the applicator up to the lumbar region

STIMULATION

Indication	Frequency	Exposure time	Time schedule	Note
Immune system activation and reinforcement	2 - 72 Hz (P2)	2 x 20 min	14 days, then 14 days off etc.	The A4C should be placed along the spine from cervical region down
Metabolic improvement	4 - 40 Hz (P1)	2 x 20 min	14 days, then 14 days off etc.	The A4C should be placed along the spine from cervical region down

Notes:

- q Multiple daily exposure should be spread out the whole day
- q P1 and P2 are universal therapeutic programs (in LT-99, LT-100, VF-XP)

- q P1/P2 means alternating of the programs P1 and P2
- q ↑P3 means the required frequency is set in P3 mode (in LT-99, LT-100)
- q B1C applicator use is equal as the BioTorus LT-100 device

- o Application regimen values are for your orientation. In some very rare cases an impairment may occur especially in magnetostimulation of inflammatory conditions. This is no reason to stop the magnetotherapy but the application should be changed typically by frequency reduction to 50% of the initial value. The total dosis can be reduced by application time reduction or by both values. When an improvement done the reduced values may increase again.
- o Magnetotherapy should be understood as a part of the complex treatment that in certain cases may be the decisive in treatment success, e.g. ankylosing spondylitis or prostatitis.
- o If you use our device regularly there are data showing that pain attacks can be eliminated for considerable long time. We have data showing this effect in ankylosing spondylitis, osteoarthritis, rheumatoid arthritis in children, enuresis in children and fibromyalgia.
- o In sport medicine the magnetotherapy has amplified effects of commonly used rehabilitation and regeneration procedures.

- § Magnetotherapy as any other kind of physiotherapy represents a weak stimulus. That's why it must be applied for a long time and regularly. E.g. a positive effects in painful and inflammatory conditions may come after three days of application but there are rare cases where the first signs of improvement were reached after two weeks of daily application. In cases of slow fractures healing the time required for an effect is still longer.

- § When the problems reduce or disappear, this fact does not mean that the therapy should be stopped suddenly. Much better is to go on with the same regimen for another week and then reduce the number of applications stepwisely, e.g. Mo, Tu, Fr. If minimum of the problems returns then start with regular magnetotherapy again for at least one week.