

Vortex implosion physiotherapy device "Live Sinus 5/5BT"

operating instructions and technical description

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Thank you for purchasing the "Live Sinus 5/5BT" kit - You made the right choice! We are sure that with its help You will be able to significantly improve your health and the health of your loved ones.

1... Advantages of the "Live Sinus" device»

The "Live Sinus 5/5BT" kit is a highly effective device for vortex implosion physiotherapy. Mishin's "Live Sinus" coils are made universal and can operate in several modes, including the new, most efficient and safe high-voltage capacitive mode.

The use of digital technologies provides: - high signal quality; - ease of daily use; - automatic maintenance of set parameters; - the ability to use a smartphone or PC to control the device.

All products of "Live Sinus" are made strictly in accordance with the recommendations of A. N. Mishin, are of high quality and are guaranteed to serve You for many years. We are sure that it will become Your faithful and reliable companion on the way to health...

2... Equipment

In this section, you can view the standard configuration. The kit you are purchasing may contain different types of coils, cables, and additional components (see section 14 "kit Contents" for the contents of Your kit).



1. 18V DC power supply, 0.7 A;
2. "Live Sinus 5/5BT" generator»;
3. indicator of the electromagnetic component of the field (color gray);
4. indicator of the electrical component of the field (green color);
5. XLR-USB cable for connecting coils in low-voltage capacitive mode;
6. boost adapter for connecting coils in high-voltage modes;
7. cable for connecting the coil in high-voltage static mode;
8. cable (color-coded) for connecting the coil in high-voltage capacitive mode;
9. USB-a–USB-mini cable for connecting the generator to a PC;
10. 3-in-1 flat universal coil (works in three modes, see section 7);
11. coil-torus (operates in two modes, see section 7).

3... Generator connectors, power and coil

connections Our generator is easy to operate in normal everyday use, it is clear and easy to turn on and control with just two buttons.

1) connectors on the generator

- a) XLR connector for connecting the load (coils, boost adapter); (first to the left)
- b) DC connector for connecting an external power source; (in the middle)
- c) USB-mini connector for connecting to a computer (at the right)



2) Buttons on the front panel of the generator



Red button – power on / off, power level selection (from 3 fixed values), General reset of generator settings;

gray button - select the shutdown timer, switch the waveform: sine/meander;

3 LEDs: indication of the selected timer, additionally-color indication of one of the three fixed values of power levels.

3) Connecting cables

Connecting the generator to the power supply



a) the XLR cable connector plug to the appropriate connector at the alternator



b) the USB connector from the opposite end of the cable into the USB connector coil



4) Connection of coils in high-voltage modes

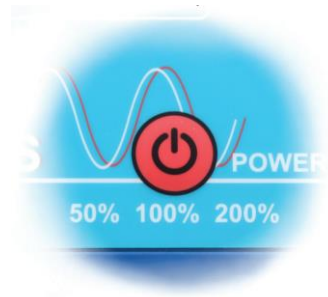




4... Turning on the generator

When power is supplied via the DC connector on the back panel of the generator, a short beep sounds, the LEDs on the front panel briefly light up and go out, which indicates that the generator goes into standby mode, which can be used for an unlimited time.

The generator is switched on by pressing the red "POWER" button on the front panel of the device once for a short time.



When turned on, a short beep sounds and the LEDs on the generator panel begin to flash synchronously and frequently, indicating the process of searching for the resonant frequency and measuring the q-factor of the connected coil. Successful detection of the resonant frequency is accompanied by a short beep. The end of the process of measuring the parameters of the connected coil is accompanied by another short beep. The generator goes into operating mode, frequent synchronous flashing of the LEDs turn into slow (one or three-with a frequency of about 1 time per second), or continuous glow (depending on what settings were in the previous turn on of the device).

If the resonant frequency is not found when the generator is turned on (a malfunction of the coil, cable, or generator itself, or an incorrect setting via an external application), the generator is automatically turned off (switching to standby mode).

5... Coil power, timer, waveform (sine-meander) switch-off timer setting

The required session time is selected by short pressing the "TIMER" button after the generator is successfully switched to operating mode. The values are switched in a circle: 15 min. - 30 min - - 45 min - - "constantly" - 15 min. etc. The timer value is indicated by the glow of the corresponding led on the front panel of the generator. Timer mode "constantly" - synchronously (1 Hz) blink or continuously Shine all 3 LEDs on the front panel of the generator.



Setting the output current (power on the coil)

After turning on the generator and entering the operating mode, you can set the required power from three fixed values: 50 % – 100 % – 200 %. The selection is made by short periodic pressing of the red "POWER" button on the front panel of the generator. The current (power) level is indicated by changing the color of the timer LEDs: green-50 %, yellow-100 %, red-200 %.



Some particularly sensitive people require a gradual increase in power on the coil, even during a single session. To implement this feature (firmware updated from 01.03.2020), another mode has been added with step-by-step auto-switching of 3 power levels during one session. If this mode is selected, the time of any timer set from the generator panel (except "Constantly", in which this mode does not work) is divided into 3 segments, each of which has its own power level. By default, the time intervals of each stage are equal, and the power levels correspond to 50%-100%-200%.

Led indication of this mode on the front panel of the generator is made by frequent flashing of two (out of the available three) and usually unused LEDs. The change of steps is accompanied by a short beep (unless the sound is disabled in the generator settings).

In the "Live Sinus" program, the corresponding fields have been added to the "generator settings" section, which will allow you to customize the duration of stages and their power levels in any way if necessary.

In addition, in the same section "generator Settings", you can activate another mode with step-by-step switching of power levels during the session. Only then does it become available from the generator panel. In this mode, the power level changes every 30 seconds. (by default). Unlike the previous step mode, this one also works on the timer "Constantly". The mode is indicated by a sequential change in the color of the activated LEDs on the generator panel with a frequency of approximately 1 Hz.

Configuring the waveform

By default, the generator sets the "sine" waveform. For Wellness sessions, professor Mishin recommends only this form of signal. For experimental purposes, you can change the waveform (sine / meander) from the generator panel. To switch, press and hold the "TIMER" button for at least 5 seconds until a short beep sounds. The led display on the front panel of the generator will indicate:

- blinks at a frequency of approximately 1 time per second-sine;
- continuously glowing-meander.

6... Disable and save generator parameters

Switching off is performed by pressing and holding the "POWER" button for at least 2 seconds – the device will turn off and go into standby mode.

In addition, the generator can be turned off by disconnecting from the power grid.

The device can also be switched off automatically:

- at the end of the set timer;
- when the generator does not find/lose the resonance frequency (for example, when the electrical connection is broken, or when the electrical quality of the connected coil is extremely low).

After any change of parameters using the buttons on the generator panel, new values (power, timer, waveform) are written to the non-volatile memory of the generator microcontroller in 20 seconds. The same thing happens when the generator is turned off by pressing and holding the "POWER" button» for at least 2 seconds. The next time you turn on the generator, it will start working with exactly the parameters that were set in the previous session.

7... Working with coils in different modes

1 mode: low-voltage capacitive

This is the standard mode of using Mishin coils. In this version, the coils (torus or flat disk) are connected directly to the generator using an XLR-USB cable. In this mode, both a flat universal coil and a capacitive torus (bagel) coil can work.



The field indicator in this mode glows brightly above the coil (Fig.), the intensity and range of the indicator depends on the power level set on the generator (output current).

2 mode: high-voltage static (so-called "pure static" mode»)

This is an auxiliary mode that is usually effective only in certain cases, such as autoimmune diseases. The coil in this mode stimulates the immune system and the entire body as a whole. The universal flat coil is connected via a step-up adapter and a non-color-coded cable. Only a flat universal coil can operate in this mode.

The normal field indicator may or may not light up. The indicator, if lit, is much less bright and at a much shorter distance from the coil than in low-voltage mode. The intensity of the indicator also depends on the power level set on the generator. To check the field above the coil in this mode, we recommend using a different indicator-the indicator of the electric component of the field.



3 mode: high-voltage capacitive

A mode in which the coil operates in a capacitive mode, while the undesirable electromagnetic field is suppressed tenfold, and the useful electrostatic field is amplified 3-5 times (for a detailed description, see the article on the website live-sinus.com in the "Information" section). Connection to the generator is made via an adapter and a color-coded cable. In this mode, both a flat universal coil and a capacitive torus (bagel) can work.

In high-voltage capacitive mode, the standard field indicator usually does not light up. As for static mode, we recommend using the electric field component indicator to check the coil in this mode.



8... Using coils from other manufacturers and homemade

One of the advantages of the "Live Sinus 5/5BT" generator is its versatility, i.e. it can work with coils from different manufacturers, including homemade ones. To do this, you must ensure that the connectors for connecting the coils are identical (use the appropriate adapters, or solder the connectors). You may need to change the default search limits for the resonant frequency of the coil in the generator settings. The correct operation of third-party coils in high-voltage capacitive mode is not guaranteed.

9... Manage using an external app

If desired/necessary, you can connect to the "Live Sinus 5/5BT" generator using the smartphone and/or PC app. In this case, the external device:

- a) becomes a monitor on which all parameters of the generator, coil, and signal can be monitored;
- b) allows you to directly control the operation of the generator, i.e. it becomes an external control panel. The current version of the program for Windows can work with individual presets (generator parameter settings files), as well as with scripts (several consecutive presets form a script), which can also be saved as files.
- C) allows you to completely change the generator settings for your specific needs, including activating additional functions that are not available for control from the generator panel.

The "Live Sinus 5" model does not contain a Bluetooth module. external control for This model is only available via the USB port. The "Live Sinus 5BT" model can be controlled via both Bluetooth and USB.

You can find current versions of apps and instructions on how to connect, configure, and work with them in the "Support" section on our website <https://live-sinus.com/>.

10... Return to factory settings

After updating the controller firmware or to return to factory settings (if the settings were changed using an external application), it is recommended to perform a General reset of the generator. To do this, press and hold the "POWER" button for at least 8 seconds (until the second series of short beeps). This can be done both in the standby mode of the generator and in the working mode.

11... Recommendations for use

General principles – they are quite simple and have been repeatedly voiced by A. N. Mishin himself.

The main principle is "do no harm", so the first weeks of working with coils should be started in a test, gentle mode – 15-30 minutes per session, 2-3 sessions a day. For people of advanced age and(or) with serious diseases, the first sessions can be limited to 5-10 minutes. In the future, the duration of exposure can be selected independently, focusing on your own feelings. With intensive use, the total duration of sessions can reach up to several hours per day. For preventive purposes, one session lasting 15-30 minutes every other day is enough. The coil can be applied to the naked body, or through clothing – there is no difference. Similarly, it does not matter which side to use the coil – any. It is important that in the immediate vicinity of the coil (20-30 cm) there are no metal objects, especially massive or having a closed shape (metal springs in the mattress, bracelets, chains, etc.). Metal absorbs the field of the coil and dramatically reduces its effectiveness. Metal implants in the body usually have a small area and reduce the efficiency of the coils slightly.

The coil is applied to the problem areas (where it hurts) during the session. It is advisable to allocate a few minutes to work with the kidneys (attach a coil to the lower back) – it is through the kidneys that the main stream of toxins removed from the body will go. For severely slugged, or having problems with the kidneys-the first sessions can only start with them. At the same time, to facilitate the work of the excretory system, you should drink more ordinary clean water.

A flat coil and the coil - torus (bagel).

Simple analogies – a flat coil "shines" with its field, like a round light bulb - in all directions, so such a coil should be used to affect large organs and the entire body as a whole. The flat coil is available in 2 sizes: medium and large. The average diameter is about 150mm, the large one is 225mm. A large coil has a correspondingly larger field size, in addition, the coil winding is made of high-quality MGTF wire (copper stranded with fluoroplastic insulation). This option significantly improves the parameters of the coil and, accordingly, increases the strength of the useful electric component of the field (static). The electrical quality factor of the coil (in the low-voltage version of switching on) is approximately 110-120 or more (for the average coil, this parameter is usually in the range of 30-40).

The tor coil has less power, but due to its shape, like a flashlight, it "shines" with a narrow and bright beam, so this coil is very effective against spot "sores" (warts, polyps, papilloma, herpes, joints, kidney/liver stones, local burns, etc., etc.).



When working with coils, different reactions can occur—from "I don't feel anything" to a strong "hangover syndrome" (intoxication from toxins and pathogens released into the blood under the influence of coils – the body is being cleaned). Between these extreme reactions, there are a large number of intermediate ones: for example, heaviness in the head, pressure jumps, increased drowsiness, or Vice versa - a surge of strength and cheerfulness, a feeling of a metallic taste in the mouth, sometimes a feeling of pulsation, tingling, or even movement in the area of exposure to the coil. A skin rash may appear briefly, because the skin, along with the kidneys and liver, performs excretory functions. Sometimes there may be a temporary exacerbation of chronic diseases – this is a normal reaction, you should not be afraid of this. Be sure to monitor all unusual reactions of the body. In case of painful manifestations, you should either reduce the time of sessions, or reduce their number, you can make a temporary pause in sessions. As in any business, when working with coils, regularity, consistency and patience are important. Some problems go away in 1-2 sessions, while others may require months of persistent work. As a rule, the older, "slagged" and sick a person is, the stronger the body's reaction to the fields of Mishin coils. That is why the recommendations for the elderly and weakened people are to start working with coils in the first weeks literally in the "test" mode. The "Live Sinus" coils are made universal and therefore can operate in different modes, depending on the method of connection to the generator.

According to A. Mishin, the main health-improving coil is switched on according to a capacitive circuit (a low-voltage capacitive connection option is when the coil is connected directly to the generator). The high-voltage static option of switching on (via a step-up adapter and cable without marking) is only auxiliary and is effective only in some cases, in particular, in autoimmune diseases. In addition, this mode stimulates the immune system and the entire body as a whole.

The new 3rd connection option (high-voltage capacitive—see the article on our website in the "Information" section): according to the capacitive scheme and via a boost adapter, the safest (parasitic electromagnetic field is suppressed tenfold) and, at the same time, the most effective (useful electrostatic field is increased 3-5 times). Therefore, the recommendation is to use this mode as the main health-improving one. To do this, the coil (flat or tor) is connected to the generator via a step-up adapter and a color-coded

cable. In some cases (with a strong slagging of the body or with increased sensitivity to electric fields emitted by coils), this mode may be too strong and causes a rapid reaction of "overdose". In this case, you should: reduce the session time, use minimal power, or temporarily switch to a less efficient low-voltage capacitive mode (when the coil is connected directly to the generator). After successfully passing the "cleaning", it is the high-voltage capacitive mode (and the flat coil) that can be used later in long sessions (for example, placing the coil all night in close proximity to the bed) – the coil is in safe mode (the undesirable electromagnetic field is extremely low, almost at the noise level), while the healing vortex electrostatic field works effectively even at a distance of 0.5-1 m (especially if you set the maximum power from the generator).

A. Mishin's recommendations is: for low-voltage capacitive options enable coils: current 50-150 mA (RMS or RMS), for generator "Live Sinus 5" this corresponds to 50-100% of capacity (respectively, green and yellow color display panel of the generator). For high-voltage modes, when the parasitic electromagnetic component of the field is almost at the noise level, you can safely use large power levels, for example, 200% (red indication color), which corresponds to 300 mA RMS (via an external application on Android or Windows, you can set an even larger current). At the same time, you should always listen to the body's reactions and, in case of unpleasant sensations, the first thing that should be done logically is to reduce the power level.

The "Live Sinus 5/5BT" kit can be used not only for humans, but also effectively for animals and plants.

12... Technical specifications

- generation method: DDS (Direct Digital Synthesizers) or direct digital synthesis;
- the shape of the generated signal:
sine,
meander,
triangle
- operating frequency range (sine):
10 kHz ... 1 MHz
- maximum load current (at a supply voltage of 24 V):
700 mA (RMS or RMS value);
1960 mA (peak/peak);
(in stand-alone operation, 3 power levels are available at the load (50, 100, 200 %, the current of 141 mA RMS of a standard industrial generator is taken as 100 %);
- maximum voltage at the generator output (at a supply voltage of 24 V):
7 V (RMS or root mean square value);
19.8 V (peak/peak);
- auto-tuning modes:

AUTO mode:

a) continuous auto-tuning to the resonance frequency (at the maximum current through the load),

b) continuous auto-tuning of the specified current through the load;

PRO mode: periodic auto-tuning of frequency and current after a user-defined time (30 seconds by default);

ENGINEERING mode: auto-tuning by frequency is disabled, by current-enabled by default;

* dual-mode timer:

a) countdown of the shutdown time (4 fixed values in offline mode, arbitrary-from an external application);

b) periodic switching on after a specified time interval (available from an external application, including setting for Autonomous operation of the generator);

• phase shift (voltage at the load relative to the current): any value in the range $\pm 90^\circ$ (in AUTO mode, the phase shift is not adjusted and by default is always 0°);

* modulations of the main carrier frequency:

* modulations of the main carrier frequency:

AM-amplitude modulation:

a) envelope shape: sine, meander, triangle;

b) am depth: 0-100 %;

C) envelope frequency: 0.1 Hz-1000 Hz;

FM frequency modulation (swiping):

a) modulating form: sine, meander, triangle;

b) depth (range) FM: 0.1 kHz-1000 kHz;

C) frequency (speed) FM: 0.1 Hz-1000 Hz

AM and FM modulations are independent of each other and can be applied separately or simultaneously.

* Communications:

Bluetooth (ver. 2) - for communication with an external app on your smartphone (Android);

USB-mini port - for communication with an external application on the PC and / or updating the firmware of the microcontroller;

XLR plug (on the case) - for connecting the load;

DS-025B (power socket on the panel) 2, 1x5, 5 mm-for connecting a power source;

* Power supply: 12-24 V of stabilized or unstabilized DC voltage, recommended power supply voltage: 18-20 V;

• Power consumed from the network, no more than: 12 W

* Electrical class: Class II

* Degree of protection: IP30

* Weight and dimensions: 460 g, (l*W*h) 130x93x39 mm.

* Operating conditions: ambient temperature from $+5^\circ\text{C}$ to $+40^\circ\text{C}$, relative humidity up to 80%

13. safety Requirements

- the design of the device ensures proper safety for the user.
- * Do not use the appliance without first reading this Manual.
- * Do not turn on the device with the case open.
- * Do not cover the air vents on the device body.
- * Disassembly and repair of the device is only allowed to specialists who have the necessary qualifications.
- * Do not use a faulty device.
- * Do not use the appliance in wet areas (for example, in the bathroom), or if moisture gets inside the case.
- In case of malfunction of the device or in emergency situations, turn off the device immediately and contact the seller from whom the device was purchased, or directly to the manufacturer.

14... Set composition

N0	Name	Quantity
1	Generator "Live Sinus 5"	
2	Generator "Sinus 5BT Live" (Bluetooth)	
3	Power supply	
4	Cable for low-voltage capacitive option to include (XLR to USB)	
5	Cable USB A – USB mini (to connect the generator to the computer)	
6	A field indicator for low voltage mode (color gray)	
7	A field indicator for high voltage modes (green)	
8	The coil is capacitive – tor	
9	Set - boost adapter + two cables (high voltage mode)	
10	Universal "3 in 1" flat coil medium, plastic / plywood	
11	Universal 3-in-1 flat MGTF coil is large, the plastic / plywood	
12	Universal "3 in 1" flat dual-frequency coil medium, plastic	
13	The passport of the product	

15...Certificate of acceptance, warranty and certificates

The set of vortex electrostatic physiotherapy "Live Sinus 5/5BT" is made and accepted in accordance with the requirements of technical SPECIFICATIONS 27.90.40-001-0125556713-2018 and declared serviceable.

The manufacturer's warranty for all components of the kit is 1 year from the date of sale. The manufacturer reserves the right to make changes to the design of the product that do not impair its consumer properties.

Date of issue: _____ sale date: _____

Controller: _____ Seller: _____

Manufacturer:

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