# <u>Space Healer - Basic</u> <u>(Neuro-adaptive</u> <u>Electrostimulator)</u> Instruction Manual

## 1. PURPOSE

The Space Healer is a Neuroadaptive electrostimulation Device (hereinafter - the device) designed for the purpose of restoring normal physiological function and pain relief by applying electrical stimulation on the skin and mucous membrane.

The device is intended for use at home, in a healthcare practitioner's office, hospital or anywhere during travel, for first aid, pain relief of any type, and a wide variety of health problems.

The operating temperature range of the device is  $10^{\circ}$  to  $35^{\circ}$  C, relative humidity up to 80% at  $25^{\circ}$ C.

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- 2.4. Amplitude of the first pulse of the second phase of impact at a standard load:

- 60 V max. At the 1st phase of 10 microseconds;

- 100 V max. At the 1st phase of 250 microseconds.

- 2.5. Time of automatic switching-off of the device (when the device is not in contact with the skin): 60 seconds.
- 2.6. Device weight: 90 g max. (With battery)
- 2.7. Max. Overall dimensions: 119x43x28 mm.
- 2.8. Meantime between failures: 1000 hours
- 2.9. Average lifetime: 4 years.

## 3. SET OF DELIVERY

The complete set of delivery of devices is reduced in table 1.

From the point of view of mechanical endurance the device comply with group 2 of GOST P 50444, from the point of view of refusals consequences - to class B of Ppl 50-707.

The device complies with GOST P 50267.0-92 (electric shock hazard) for products with built-in power supply.

#### 2. PARAMETERS

- 2.1. Power supply: 9 + (1 1.5) V
- 2.2. Max. Power consumption: 50 mA, continuous operation at maximum power consumption: 3 hours.
- 2.3. Basic operation modes:
- 2.3.1. D60: Dosated mode and continuous at a constant frequency 60 Hz ±10 %;
- 2.3.2. 90: Continuous at a constant frequency 90 Hz ±10 %;
- 2.3. Adjustment of duration of the 1st phase of pulse: 10... 250 microseconds ±5%.

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Table 1

Name	Num- ber (pcs.)	Com- ment
Neuroadaptive Elec- trostimulation Device	1	
Battery 6F22 9V	1	
Velvet carrying sachet	1	
Certificate	1	
Manual	1	

## 4. EQUIPMENT DESIGN

- 4.1. The device consists of a housing (Fig. 1) with a built-in electrode 6 located at its bottom.
- 4.2. The device is equipped with LEDs, located on the upper side of the housing:

Light-emitting diode 1 - indication of the output power level;

Light-emitting diode 2 - indication of Dosated mode (D) and Operation Freq. of 60 Hz;

Light-emitting diode 3 - indication of Operation Frequency at 90Hz;

The LEDs 2 - 5 are also designed for mapping the dynamics of treatment process in



## **5. SAFETY REQUIREMENTS**

5.1. The device meets the electric safety requirements of GOST P 50267.0-92.

#### 6. PRE-STARTING PROCEDURE

Hygienic preparation of the device:

- 6. 1. Before and after using the device: To observe the hygienic requirements it is recommended to treat the electrode each time using a cotton pad or tissue paper wetted with a mild detergent or alcohol (with consequent drying).
- 6.2. INSTALLATION AND REMOVAL OF THE BATTERY. Slide open the rear cover 6 to the top and insert a 9V battery, paying attention to the polarity of the terminal. You will hear a beep sound. If there is no sound it may be of wrong polarity inserts or otherwise necessary to perform a pre-set of the program operating the device. Remove the battery if the device

Dosated mode and the amplitude of the power selected when buttons  $\oplus$  or  $\bigcirc$  is being pressed.

- 4.3. The device has the following controls, placed on the upper surface of the housing:
  - Button  $\bigcirc$  for turning the device ON and OFF;
  - Button •- select between the modes;
  - Button  $\oplus$  increases the power output.
  - Button  $\bigcirc$  decreases the power output.
- 4.4. Power supply self-contained using a 6F22 (9V) battery.
- 4.5 Accessories (optional) multi pins comb, Y-Shape ball electrodes and a pair of carbon/silver impregnated ruber pads can be connected to DC Jack (8) for applying the treatment to hairy parts of the body, enhancing the effect or hands free stick on treatments.

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is not likely to be used for some time.

6.3 PRE-SETTING THE DEVICE. This is accomplished by first pressing the button (and while still maintaining the button (pressed, press the button (b) once and release it prior to the button (c).

The pre-set (clear) of the device should be done if a program failure occurs or whenever you want to start a new treatment.

The pre-set will set the initial parameters of the device to the following values:

- Power level of actuating pulse is minimal,
- Frequency 60 Hz,
- Dosated mode is on
- 6.4 INCREASES AND DECREASE OF POWER.

Turn on the device by pushing the button  $\ensuremath{\boldsymbol{O}}$  for one second. Then the power is

increased or decreased by holding down button for increase of power or button  $\bigcirc$  for decrease of power. The LEDs 2,3,4,5 will indicate the ampitude of the output whenever the or  $\bigcirc$  buttons is being pressed.

6.5. MODE SELECTION AND DEVICE CHECKING .

Press the button  $\bigcirc$  switch between the modes (consecutive blinking of LEDs 2 or 3).

Pressing the mode button ( does mode selection. The lit up of the LED 2 or 3 will indicate which of the respective mode: D60, 90 is selected.

- 6.6. TURN OFF THE DEVICE by pushing the button  $\bullet$ .
- 6.7. INDICATION FOR LOW BATTERY. The battery voltage monitoring process is continuous during the device operation. When the power becomes lower than 7.0 to 7.5 V, a

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sensations such as slight pricking or vibration that does not cause pain.

- 7.4. For obtaining a therapeutic effect switch to the required operation mode, then place the electrode on the corresponding skin area (see the operating manual).
- 7.5. Periodic pushing of the button switches between the modes: "D60", "90".

In the "D60" mode selection, there is while the corresponding LED is lit up by the button turn on the dosated mode and the operation frequency of 60 Hz is selected.

Intermittent sound signal and blinking of LEDs 2,3,4,5 mean termination of dosated effect when treatment under the dosage mode.

In the "90" mode selection, there is while the corresponding LED is lit up by the button (), the operation frequency of 90 Hz is selected and the dosage mode is turned off.

0.5 to 1 second beep occurs and the LED 5 will light up. In this case the battery should be replaced according to cl. 8.2.

#### ATTENTION! When the power becomes lower than 6.5 - 7.0 V there may be some problems with turning the device off.

#### 7. OPERATING PROCEDURE

- 7.1. The device is to be operated by one hand. Watch the LEDs and sound signals.
- 7.2. After turning on the device it loads all the stored parameters.

## ATTENTION! In order to prevent a patient from unpleasant sensations, it is recommended to start from minimal by reduce the power output (push and retain the button $\bigcirc$ until beep sound).

7.3. Place the electrode on the patient's skin for several seconds to make sure that there is no unpleasant sensations, push and retain the button (+) until the patient feels the first

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- 7.6. For turning the device off pushing the button
  O. The device will store all the parameters in its memory.
- 7.7. The device is automatically turned off if during 60 seconds no buttons were pressed and there was no contact with a patient's skin. The device will save all the parameters for future work.

ATTENTION! The auto-off mode could be activated if the skin is too dry, this can be solved by applying a wet tower over the skin before the treatment.

If you are not sure what mode is set, check the parameters by pressing the button (a), the corresponding mode indicators will lit up for 1 sec; or you can reset the device to the initial settings.

7.8. For RESETTING THE DEVICE, (push the ↔ button once while holding down • button). Thus the parameters of cl.6.2 will be set.

#### 8. MAINTENANCE

- 8.1. The device may only be repaired by the manufacturer.
- 8.2. When the battery power LED (1) begins blinking and a continuous beeping sound is heard it is time for replacing the battery. Slide the cover 7 upward at the end of the device and replace the battery. Make the pre-set procedure by pushing the button O once while holding down the button . Check the parameters and turn off the device.

## 9. TOUBLE SHOOTING

- 9.1. For troubleshooting see Table 2.
- 9.2. If some other troubles occur please contact the manufacturer.

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- of the technical specification TY 9444-010-05010925-97 if the consumer observes the above rules.
- 10.2. Warranty period is 12 months from the date of sale of the device.
- 10.3.In case of malfunction of the device during the warranty period it must be returned to the manufacturer together with the warranty certificate.
- 10.4. Without the warranty certificate, or if the seals are broken, the claims for quality of device operation and warranty are void.
- 10.5.The repair of devices is made by the manufacturer at the expense of customers in the following cases:
  - Operation of operation with violation of the present requirements;
  - Violations of the manufacturer's seals;
  - Failure after the warranty period is over.

Trouble	Possible Cause	Correc- tive Ac- tion
Some adjust- ments do not function or after battery re- placement the requirements of cl. 6.3 are not met.	Processor error	Reset the device Cheek the cl. 6.3 compli- ance
The device does not turn off.	The battery is discharged	Replace the battery

## **10. WARRANTY**

10.1.The manufacturer guarantees the compliance of devices to requirements

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## **11. TRANSPORTATION**

- 11.1.The transportation of devices to the consumer is carried out by all kinds of the covered vehicles, except for unheated aircraft pods, in ambient temperature ranging from - 50° to + 50°C, at humidity of 80 % (at + 20°C) with a protection against precipitations.
- 11.2. After transportation at subzero temperatures the devices in packing are to be thawed out at normal climatic conditions for at least 4 hours before use.