

LLC Tronitek
Ekaterinburg, Russia
Transcutaneous Electrostimulator



Operations Manual

DENAS-OSTEO

2nd generation

<http://www.diadens.com>

Россия/ Russia	
ЕС, все страны/ EU, all	
США/ USA	●
Канада/ Canada	

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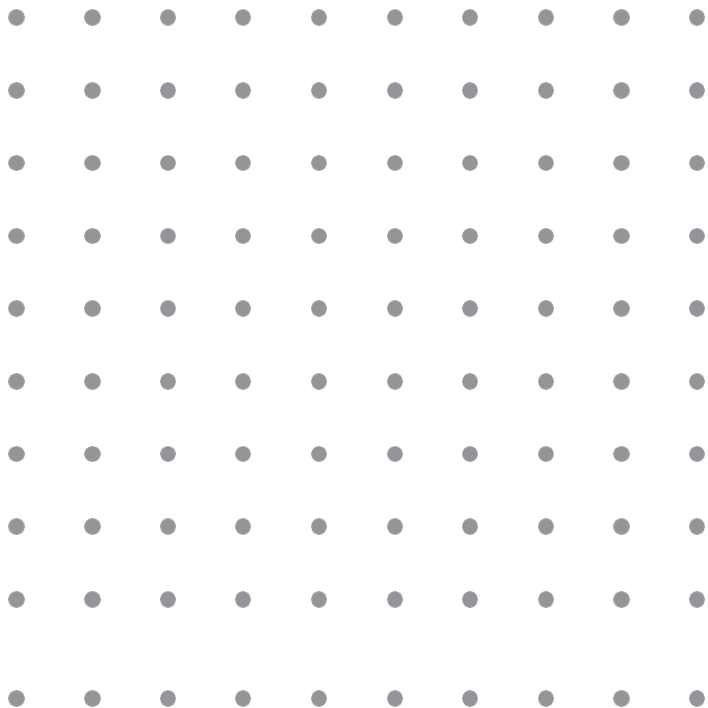
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This Operations Manual is intended for the DENAS-Osteo electrostimulator with built-in electrodes for stimulation of reflex zones on the posterior surface of the human neck.

The Operations Manual includes the Technical Passport (part 1) and User's Instructions (part 2).

PART 1

Technical passport



2. INTENDED USE



Transcutaneous electrostimulator DENAS-Osteo (hereinafter - the device) is used for treatment and prevention by electrostimulation of the reflex zones on the posterior surface of the human neck. The device has built-in electrodes.

The DENAS-Osteo is intended for individual application in patient-care institutions and in life conditions in compliance with the recommendations of the attending doctor.

4. COMPLETE SET

The complete set of delivery of the Osteo-DENS device should correspond to Table 6.

Table 6

Name of the device, part, document	Quantity
Control unit	1
Block of neck electrodes	1
Operations Manual	1
Case	1
Power source (AA type)	2

5. DESIGN OF THE DEVICE

5.1. General Information

The DENAS-Osteo consists of the block of neck electrodes and the control unit connected with the cable. The power sources to be placed into the compartment of the block of neck electrodes.

5.2. Block of neck electrodes

The block of neck electrodes (Fig. 1) is to be fixed on

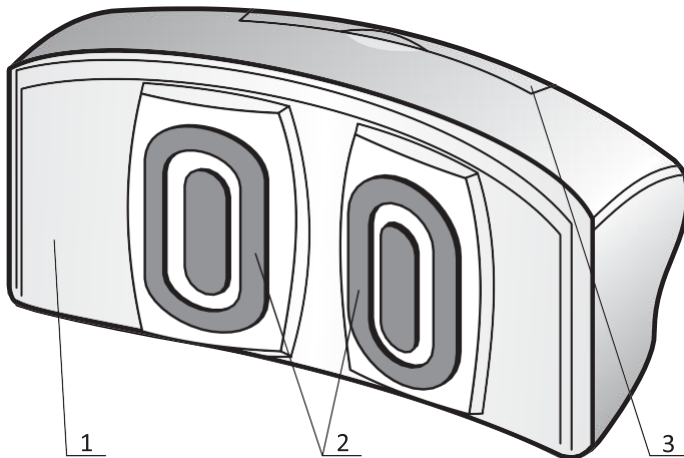


Fig. 1. Appearance of the Block of Neck Electrodes

1. Body
2. Built-in Electrodes
3. Cover of the battery compartment

the posterior surface of the patient's neck with the help of a soft elastic bracing. Electrostimulation of the reflex zones on the posterior surface of the human neck is conducted directly from the block of neck electrodes.

Attention! *Before the treatment procedure with the device it is recommended to take off current-conducting decorations (metallic chains and so on).*

Attention! *Allergic reactions are possible due to individual intolerance of the materials used in the device. In case of allergic reactions you should stop the procedure and contact your physician.*

5.3. Control Unit

The control unit (Fig. 2) provides control of modes and power of electrostimulation in the block of neck electrodes via the connection cable.

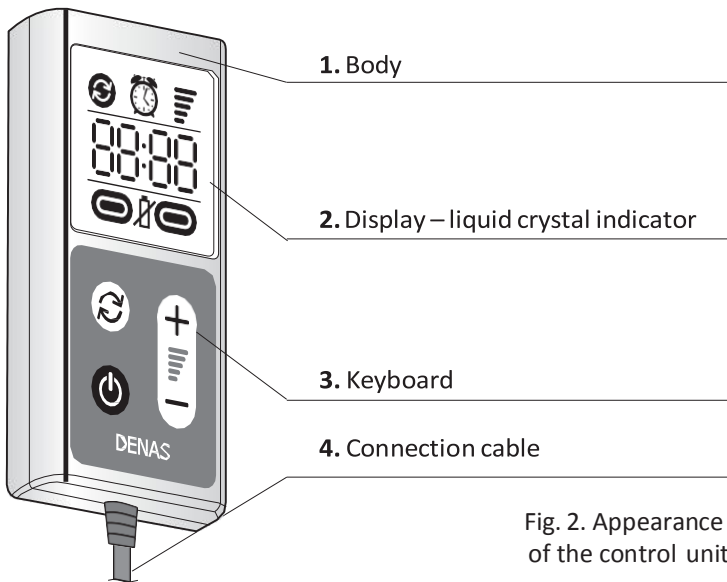






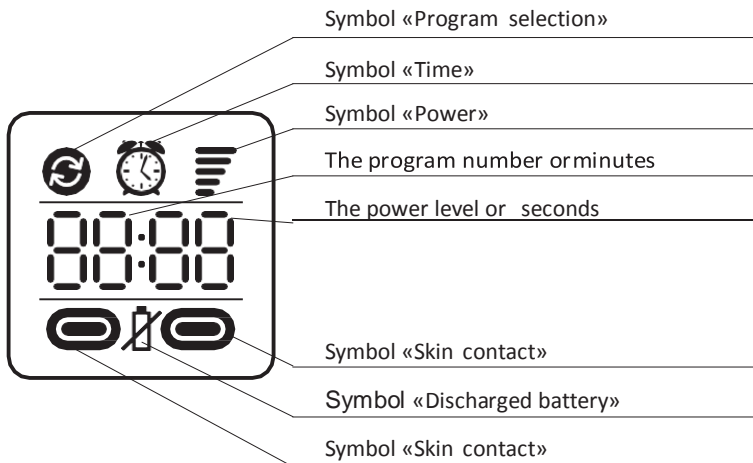
Fig. 2. Appearance of the control unit

5.3.1. Control Buttons on the keyboard

Table 8

Control Buttons*			
			
Switch on/off of the apparatus	Switching between electrostimulation modes	Reduction of the treatment power	Increase of the treatment power

5.3.2. Indicator of the Control Unit



* When pressing any of the keyboard buttons, the indicator flashes.

- 3) actions of the third party;
- 4) force-majeure.

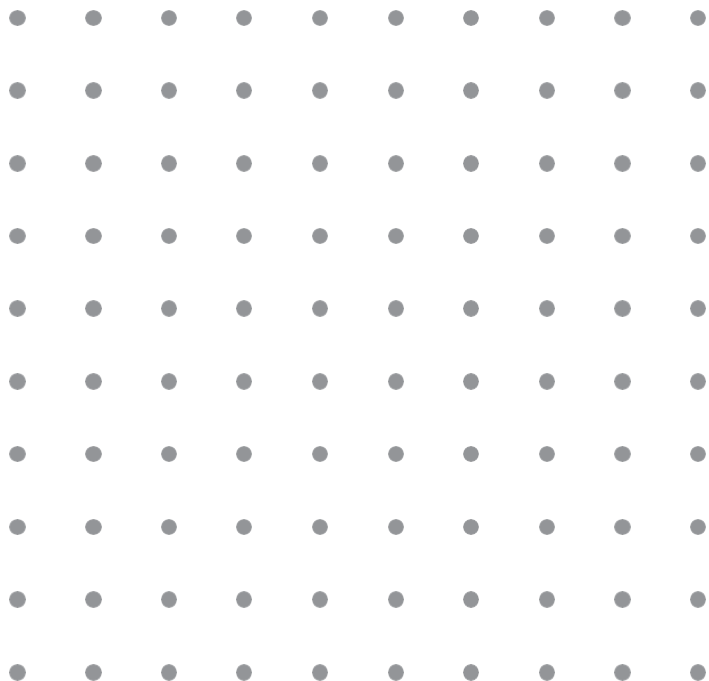
10.5. Warranty obligations do not apply to products with broken manufacturer's seals.

10.6. In case of unit breakdown or malfunction within the warranty period, as well as in case of incomplete shipping is found, the owner must send the device and following documents to the manufacturer's address or manufacturers' representative: claim for repair (exchange) with name, address, telephone number; instruction manual, defects list with brief description of the malfunction, date and conditions of its appearance.

Official webstores:
www.diadens.com

PART 2

User's instruction



USER'S INSTRUCTION

Thank you for purchasing the device “Denas-Osteo“!
To use the device comfortable and safe, please read attentively this manual.

The neck is the most mobile and vulnerable part of the spine that is why every person has pain in the neck during his life regardless of the age and gender. Among other reasons for pain the most frequent ones are diseases and traumas of the cervical spine, muscles, and neckligaments.

The name of the cranial vertebra is atlas. Atlas in the Greek mythology is a Titan who supports the dome of heaven on his shoulders. The neck supports the head, and blood supply of the brain depends on health of the cervical spine, muscles, vessels, neck legaments. That is why, pain in the neck needs special attention and special treatment. In this regard, the injury of the cervical spine is often accompanied by headache, dizziness, increased weather sensitivity, intolerance stuffy rooms and other symptoms of vegetative disorders. Therefore, the pain in the neck is always required special attention. Regardless of the clinical finding therapy and prevention of exacerbation require complexphysiotherapeutic

activities including dynamic electroneurostimulation (DENAS) which plays an important role. DENAS application in combination with other treatments, as well as a separate method of healing promotes positive changes in many acute and chronic health diseases and speeds up the healing process.

1. FUNCTION

The device is intended for correction of functional disorders conditioned by affection of the cervical spine, neck and shoulder girdle muscles.

2. INDICATIONS AND CONTRAINDICATIONS FOR APPLICATION

2.1. Indications for Application

Pain syndrome, muscle tension, restriction of movement, muscle fatigue, headache, weather sensitivity and other functional disorders, conditioned by diseases of the cervical spine, neck muscles and shoulder girdle, and also long forced position or heavy exercises and other causes.

2.2. Contraindication for Application:

Absolute:

- individual intolerance of electric current;
- presence of an implanted pacemaker;

Relative:

- epilepsy;
- neoplasms of any etiology and localization;
- acute fevers of unknown etiology;
- venous thrombosis;
- condition of acute mental excitement, alcohol or drug intoxication.

Attention! *In the above cases of contraindications application of the device should be first discussed with the attending a physician.*

Attention! *In case of individual intolerance when during the treatment procedure the state of health is worsened and pain increases, stop the procedure and urgently consult a physician.*

Attention! *Not apply the device in the presence of skin diseases and symptoms of inflammation of the skin as well as damaged skin areas if they are located in the area of stimulation.*

Attention! *If there is allergic reaction in the zone of contact of electrodes with the skin you need immediately stop apply the device and consult a physician.*

4.3 Programs of stimulation

Basic user programs options			
Symbol on display	Name	Duration (min.)*	Application area**
1	Pain therapy	20	In the presence of severe pain in
2	Relaxation	15	When muscle tension without pain
3	Headache	15	When muscle tension and discomfort in the neck in combination with a headache
4	Weather sensitivity	20	When muscle tension and discomfort in the neck combined with weather sensitivity

** Time, frequencies and modulation of parameters are set automatically depending on the application program.*

*** Selecting a program is carried out with the dominant complaint. For more information on the use of dynamic electroneurostimulation in various diseases you can find in Practical Guide to dynamic electroneurostimulation / Ryavkin SY, Vlasov AA, Nikolaeva NB, Safronov AA, Umnikova MV, Yekaterinburg: Tokmas - Press, 2011.*