

Device for generating modulated  
signals  
**«BIOMEDIS M»**

**INSTRUCTION ON APPLICATION  
(PASSPORT)**

*Before application  
study the instruction*

## **Content**

Scope of delivery  
Structure of device  
Indications for application  
Preparation for usage  
Way of application  
Safety measures  
Technical characteristics  
Warranty obligations

### **Scope of delivery**

- 1) Device BIOMEDIS
- 2) Network supply battery charger
- 3) USB-cable
- 4) Application instruction (passport)

## Structure of device

The device "BIOMEDIS M" represents a device-generator of rectangular radio-frequency pulses with amplitude manipulation of carrying frequency by impulses with variable frequency from 0 up to 20000 Hz, with radiating antenna. Frequency of modulation is set through program (according to chosen algorithm of work).

It is possible to program different programs with set of modulating frequencies in memory of the device; the programs may be used for creation of complexes. Each program consists of set of frequencies fulfilled consecutively or parallel. The device is fitted with graphic TFT display 1.77". Manipulations with the device are carried out through keyboard with tactile feedback.

Supply of the device is carried out from built-in LiPol accumulator with a capacity of 300 mAh. The accumulator provides instant work of the device during 15 hours.

The device is fitted with USB-port for connection with PC (it is used for downloading of programs and complexes from PC, if corresponding software presents). The same port may be used as input for charging of device's accumulator. PC or power adapter of 5V with corresponding output may be used as external power supply.

The device is fitted with slot micro SD for expansion of memory's capacity. Maximal capacity

of flash memory card supported by the device is 8GB.

## Preparation for usage



Image 1. Front panel of device

1 - On/off button

2 – Display

3 – Arrow keys

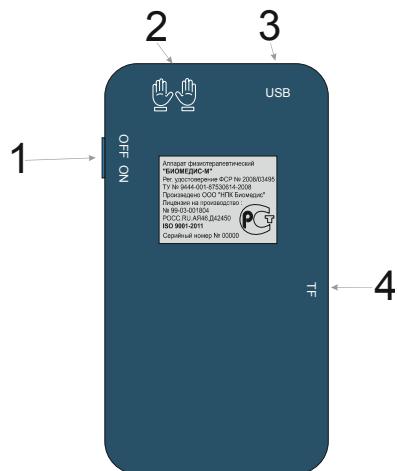


Image 2. Rear panel of device

1 – On/off button

2 – Connector of external interface

3 – mini USB connector

4 – microSD connector

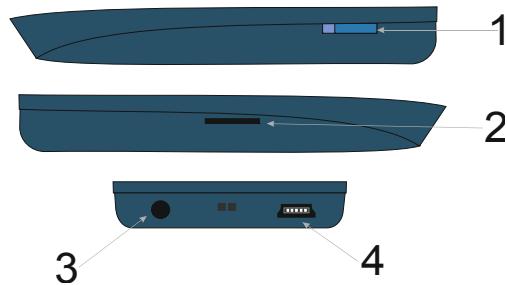


Image 3. Side panels

- 1 – On/off button
- 2 – microSD connector
- 3 – Connector of external interface
- 4 – mini USB connector

1. Check workability of the device, turning on power! Move the button (Images 1, and 2) to the ON position for this purpose! When you do it, the name of the device will be written on display. Then you will see the MAIN MENU (Image 4) of program on the display of the device. If it

is needed, charge the device (see the paragraph 6)!

Move the button 1 to the position OFF (Images 1, and 2) in order to turn off the device!

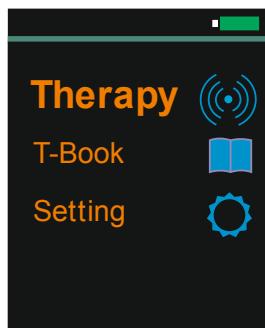


Image 4. Main Menu of device

**Way of application**

**1. Main Menu**

- 1.1 After you will have turned on the device, the following information will be displayed

on the screen (from the top till the bottom)  
(Image 4):

Therapy - Regime of Therapy  
T-Book - Regime of viewing text  
description of program  
Setting – Regime of setting device

1.2 Use  and  , and  
 then click  for choice of the  
needed item!

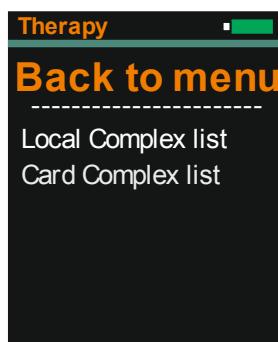


Image 5. Choice of memory's directory

**2. Regime Therapy**

2.1 If a memory card is inserted into the device, after you will have chosen the regime Therapy, you will be asked which memory's directory should be used for reading files: the directory of the device itself – Local Complex list, or the directory of micro SD – Card Complex list (Image 5). Choose needed

button  or 

 press ! If one of the directories is empty, this item will be not contained in the menu. If you desire to return to the menu, you should choose "back to menu" and then click



2.2 Then Complex list will be displayed in the chosen directory (Image 6).

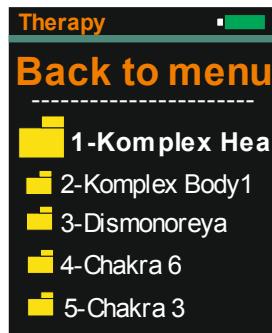


Image 6. Display of Complex list

2.3 Use the buttons  and , and then press  for choice of the needed complex!

2.4 Click "back to menu", and then press  to return to menu!

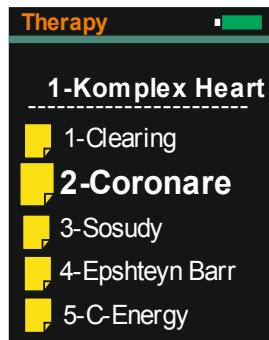


Image 6.1 Display of complex contain (list of programs contained in the chosen complex)

2.5 Choose a program which will be used as a start of the complex, utilizing the

buttons  and  ,

and then press the button  (Image 6.1)!

2.6 If you want to go back to the previous menu item, choose the top menu item,

having the name of the complex, and

then press the button **OK** !

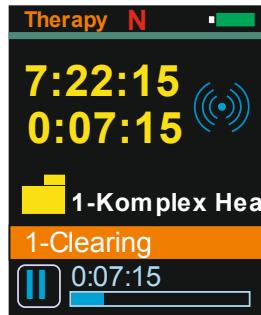


Image 7. Display of complex's time parameters

2.7 After you will have chosen a program to start a complex, the following information will be displayed on the screen of the device from the very top till the bottom (Image 7):

- time duration left till the end of the complex in the format "hh:mm:ss",

- time duration left till the end of program in the format: "hh:mm:ss";
- name of the complex applied;
- name of the program applied;
- regime of the work (pause-application);

- time duration of the program applied with graphical display of fine-tuning. The program is not carried out in this

 regime. Click  to go back to the previous menu item!



2.8 Press the button  (picture 8) to launch the complex (program)!

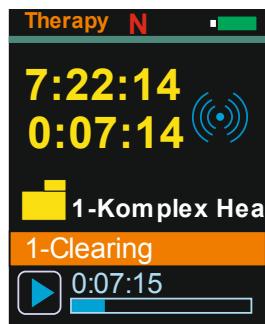


Image 8. Implementation of complex

2.9 The pictogram  in the left bottom of the display is transformed to the

 pictogram during implementation of complex. Timer counts down duration of complex (program).

2.10 Press  to pause implementation

of complex (program)! Press  ,  
 and then click  to stop  
complex (program) completely!

2.11 Use the buttons    
(Image 9) for fast transition to  
previous/next program during  
implementation of complex!

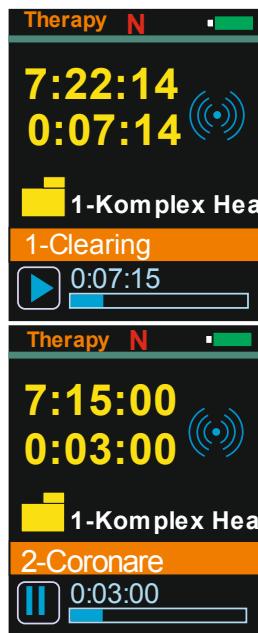


Image 9. Changing of programs inside complex

2.12 Complex (program) can be implemented through 3 regimes; each regime is displayed through corresponding

pictogram on the top of the display next to the record "Therapy":

**N** - normal regime; complex is implemented once consistently: one program after another;

**1**  this pictogram shows that just one program included in complex, displayed on the screen, is implemented cyclically till the forced stopping. Choose needed program, using the buttons  and !

**K**  - cyclical regime: complex is implemented

multiply: one program after another, till the forced stopping.

Press **OK** during implementation of complex (program) to choose the needed regime for implementation of complex (program) (Image 10)!

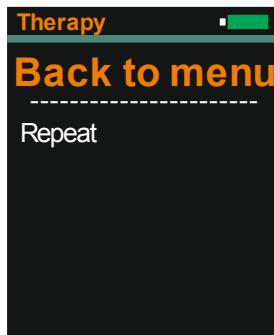


Image 10. Choice of regime for implementation of complex

Choose the upper menu item, and press

**OK**

, to go back!

2.13 Choose “Repeat” and press

**OK**

(Image 11), to continue setting!

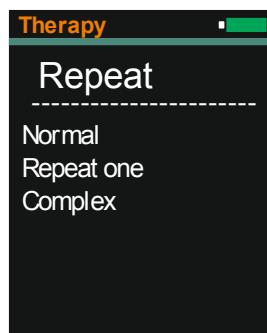


Image 11. Choice of regime for implementation of complex

2.14 Then choose needed regime:

- Normal – normal regime **N**

- Repeat one – repeat of one program

1 

- Complex – repeat of the whole

complex  through usage

of the buttons  

and pressing of .

2.15 Choose the upper menu item and press

 to go back to  
implementation of complex (program)!

### 3. Regime T-Book

3.1 This regime allows viewing files – descriptions of each therapeutic program. Files are created automatically with the help of a special program installed on PC.

Choose T-Book and press  
(Image 12)!

OK

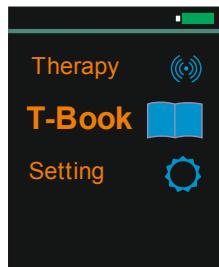


Image 12. Choice of  
regime T-Book

If it is needed, repeat instructions given in the  
paragraph 2.1!

3.2 Then the complex list is displayed in the  
chosen directory (Image 13).

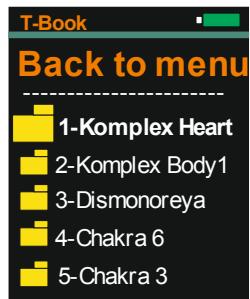


Image 13. Display of complex list

3.3 Use the buttons



and press **OK** for choice of the  
needed complex!

3.4 Choose "back to menu" and press

**OK** to return to menu!

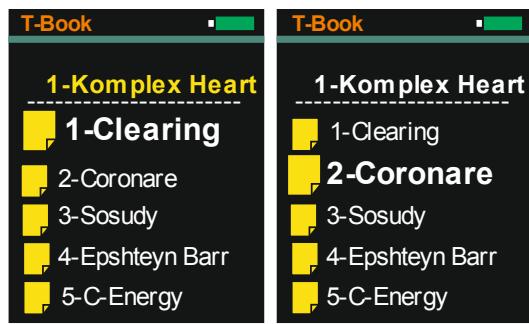


Image 14. Display of complex contain (list of programs included in chosen complex)

3.5 If you desire to view description of a program, choose the program, using the

buttons   , and

then press  (Image 14)!

3.6 If you want to return to previous menu item, choose the upper menu item,

having the name of the complex, and

then press **OK**!

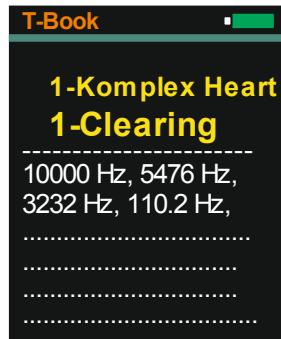


Image 15. Display of text description of program

3.7 Then text description of program will be displayed (Image 15). Use the buttons

  to scroll through the text!

#### 4. **Regime Setting. Settings**

4.1 This regime gives the possibility to change settings of the device. Choose the item "Setting" in main menu, and then

press **OK** (Image 16)!

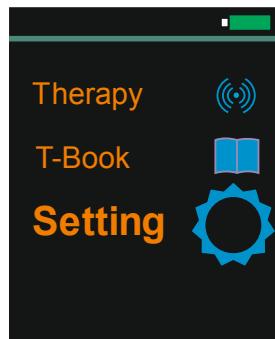


Image 16. Choice of regime Setting

4.2 The list of settings includes the following items (Image 17):

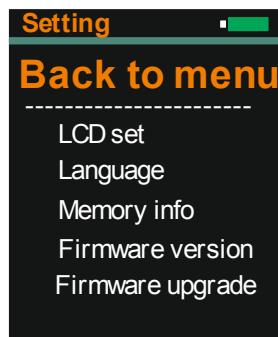


Image 17. List of settings

- «LCD Set» – setting of time, after which keyboard will be blocked and display will be switched off
- «Language» – menu language
- «Memory info» – information about memory
- «Firmware version» – firmware version of device
- «Firmware upgrade» – updating of firmware (only for service centers).

Choose needed item, using



and pressing



! Choose

“back to menu” and press



to go back to

main menu!

4.3 **LCD Set** is time duration, after which the keyboard will be blocked and the display will be switched off (for charged energy saving). Possible time options last from 0 to 50 seconds. If you set the time 0, the display and the keyboard are not blocked.

Use the buttons



and press

to set up needed option! After the display has been switched off and the keyboard has been blocked during working of the device, pressing of any button causes activation of the display; then if you try to use the

keyboard, the sign of locked padlock



appears on the display. Press and



hold till the sign of opened



padlock appears, in order to  
unblock the display.

4.4 **Language** is menu language. Use the



, and



press to set up needed  
language!

4.5 **Memory info** displays memory capacity  
of the device, noticing used and unused  
memory.

4.6 **Firmware version** displays the firmware's version of the device.

**5. Choice of impact's intensity**

5.1 This version of the device allows the possibility to change intensity of the device's high-frequency radiation. Intensity of the device can be set up, beginning from 0 till 10 nominal units. The level 10 is used as default in the device. To change the level of radiation during the process of the therapy's application,

you should press , select the needed level, using the buttons



**L**

, and then press

 **OK**

**6. Charging of device**

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6.1 The pictogram which displays the level of battery's charging is in the upper right corner. If the battery's intensity drops below the minimum permissible level, the pictogram is EMPTY. It is needed to charge the battery in order to avoid switching off the device during the therapy.

**Attention! Starting charging can be carried out without interrupting the process of the therapy, only if you use battery charger.** In this case you should use the charger, utilizing the corresponding device's connector with the help of the cable included in the kit!

6.2 The device has USB-port for connection with PC. The port can be used as an input for charging of the device from external supply source and charging of

the device's battery. PC or any adapter of 5V, having appropriate connector, can serve as external supply source. If the device is connected with PC, the record CONNECT is displayed on the screen.

**(Attention! If the therapy is being carried out, the process of the therapy will be stopped, you will need to restart the process of the therapy after prolonged holding and releasing the button**

**OK**

**and going to main menu.)**

- 6.3 PC determines the device as standard external drive – drives (depending on the condition, whether SD-card is inserted into the device or not).

6.4 The process of charging is displayed through pulsation (filling) of the battery icon. When the battery is charged, the icon of battery capacity will be full.

correctly. It is necessary to contact doctor to use the device more effectively.

### **Indications for safety measures**

1. Water must not penetrate into inputs and connectors of the device.
2. In case of improper work of the device, you should turn off it immediately. Don't use devices with have evident damages (broken wire or broken casing)!
3. Don't keep the device near open flame!
4. Don't leave the device prolonged time under direct sun lights!
5. Keep the device away from children!
6. Don't use the device in bathroom or in another wet room!
7. The device can be used for children's treatment only under supervision of adults.
8. Don't put the device into ovens of SHF!
9. Don't disassemble the device!
10. Don't put the device into water!

## **Technical characteristics**

Dimensions (not over than) 79x42x11 mm  
Parameters of therapy's signal on connector of external interface:  
Amplitude of signal (not over than) 3V  
Form of signal - any  
Frequency range - 0.01 - 20000.00 Hz with frequency step 0.01 Hz  
Parameters of signal for contactless therapy:  
Carrying frequency - 24 MHz+- 1%;  
Intensity of electromagnetic field while being not over than 10 cm from the device - 10 V/m;  
Type of modulation - amplitude modulation;  
Frequency range of modulating signals 0.01-20000.00 Hz with frequency step 0.01 Hz;  
Form of modulating signals - any;  
Supply voltage 3.7 V (inner LiPol battery with capacity 300 mAh);  
Current consumption - not over than 30 mA;  
Memory capacity of device - 8 Gb;  
Maximal memory of microSD card supported by device - 8 Gb.  
All needed connecting cables come in the kit together with the device.

## **Warranty obligations**

1. The manufacturer guarantees conformity of the device with technical conditions, if

conditions of storage, transportation and exploitation are followed.

2. Warranty period of operation is one year since the day of purchase.
3. If mechanical failures of components of the device "BIOMEDIS M" occur through no fault of user, replacement of the whole device as well as its components is possible.
4. The warranty doesn't apply to device which has signs of essential mechanical and chemical damages which destroy constructive integrity of the device.
5. Warranty period of operation is calculated since the date of purchasing device or since the date of getting the device by postal service.

**FCC Statement**

**This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules.**  
**These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause**

**harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:**

- Reorient or relocate the receiving antenna.**
- Increase the separation between the equipment and receiver.**
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
- Consult the dealer or an experienced radio/TV technician for help.**

**To assure continued compliance, any changes or modifications not expressly approved by the party. Responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).**

**This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.**

**Warranty card**

(It is filled with the seller)

Device "**BIOMEDIS**"

Seller \_\_\_\_\_

Signature

Sale date « \_\_\_\_ » 201

Stamp of trade enterprise:

It is filled in case of repair:

Performed operations on repair:

Performer \_\_\_\_\_

S.P. \_\_\_\_\_ Data

« \_\_\_\_ » 201 г.

The name and the address of the enterprise  
executing warranty repair:105122, Moscow, Shchelkovskoye highway, 2A  
ph. +7 (495)6468826 www.biomedis.ru