



**Bio-Cor Device Manual**  
**Ver. 12-2017**

# Bio-Cor device Manual

December 2017

## Contents

Purpose.....	3
Bio-Cor Setup.....	3
Operation Instructions.....	5
Bio-Cor regimes.....	5
About Binaural beats.....	7
About EHF influence.....	8
Spheres of Application.....	8

## Purpose

Bio-Cor device is made for stress relief with the use of audio stimulation (with binaural beats influence) and extremely low intensity Extremely High Frequency (EHF) electromagnetic fields. It can be used for developing a better lifestyle. Bio-Cor is using Extremely High Frequency (EHF) in the gigahertz range of extremely low intensity (less than 10 mW/cm<sup>2</sup>).

Bio-Cor is absolutely safe for any kind of patients of any age.

Recommended usage: once a day, preferably before the sleep.

## Bio-Cor Setup



- 1 – ON button;
- 2 – lights;
- 3 – audio signal input;
- 4 – USB connection for external inductor;
- 5 – earphones connection (the Red jack);
- 6 – earphones connection (the Green jack).

Fig.1. Bio-Cor device.

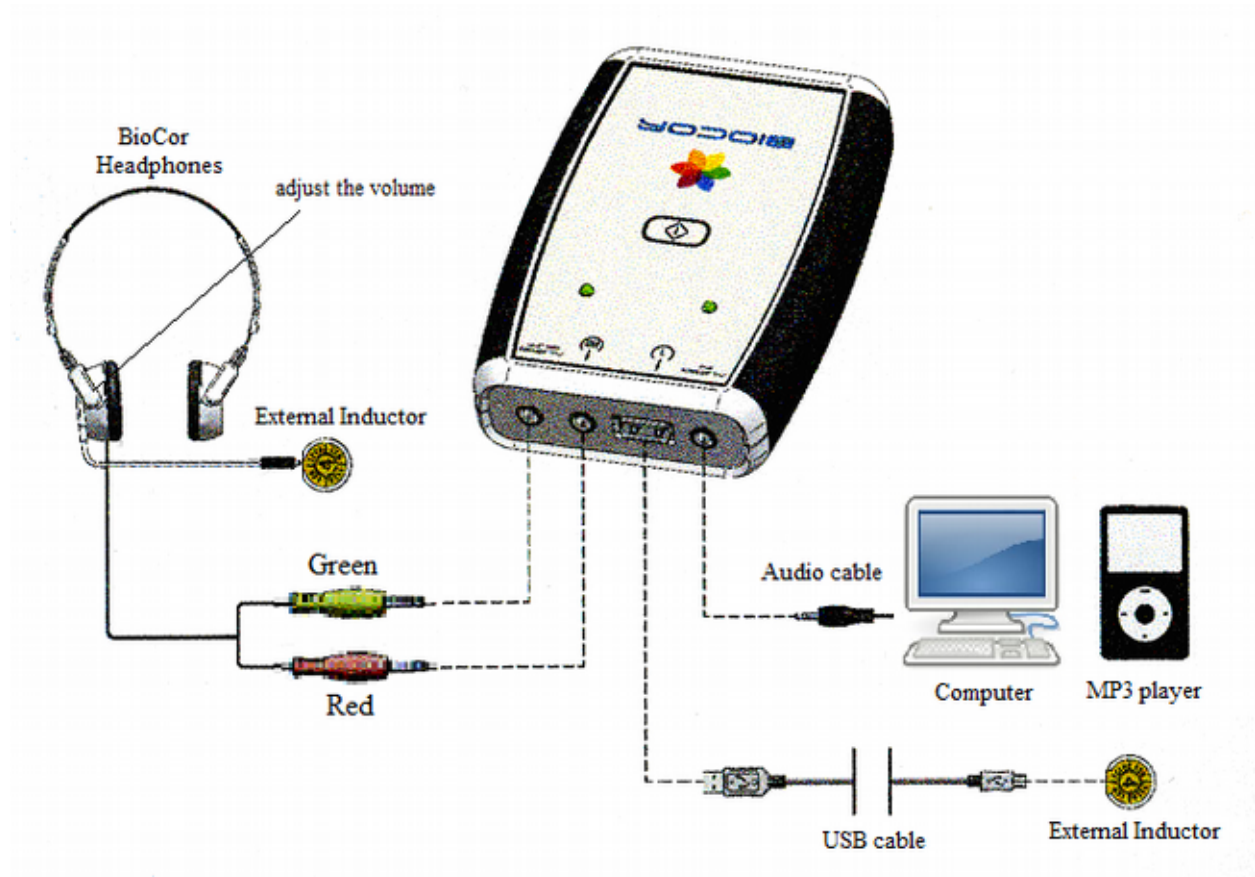


Fig.2. Bio-Cor device connections



Fig.3. USB External Inductor

## Operation Instructions

1. Open any audio file on your computer, cellphone or any audio player.
  2. Connect Bio-Cor, computer (or other audio source) and earphones as shown at fig. 1, 2.
  3. Connect USB External Inductor to the Bio-Cor device via USB cable and apply it to any acupuncture point (optional) on the body OR put it below or on top of a glass with water (not touching water!).
  4. Connect External Inductor (yellow tablet with round input) to the microphone stick of the earphones.
  5. Take earphones on with microphone stick touching the forehead area.
  6. Start playing audio file.
  7. Press ON button on the Bio-Cor device (fig.1).
  8. Lights will blink when the audio file is on.
  9. Adjust individual volume. If the sound volume is too low – device will turn off automatically.
  10. After audio file is over Bio-Cor will turn off automatically.
- NB! Bio-Cor working cycle is maximum 300 seconds (5 minutes) after which it turns off automatically even if audio file is still playing. If you want you can start a new cycle by clicking “Start” button on Bio-Cor again.

## Bio-Cor regimes

Channel	Wavelength (mm)	Number of consequent cycles	Active phase time (sec.)	Passive phase time (sec.)
1	1.8+4.0+7.7+8.2+9.2	1	300	0
2	4.9+5.5+7.8+9.5	3	60	60

Bio-Cor will switch ON only if:

- at least one external inductor (circular yellow tablet) is connected;
- you click ON button.

NB! EHF influence will be active only if the music melody is playing.

Regimes of the Channels:

Channel 1 (additional inductor): works for 5 minutes (EHF is emitted) and then it is switched OFF.

Channel 2 (inductor on the headset): works in cycles – 1 minute in active regime (EHF emission), then 1 minute in passive regime (no EHF). This cycle is repeated 3 times.

Bio-Cor will automatically switch off when all these regimes are finished or the melody is over. When the melody ends Bio-Cor switches off in 2 seconds, no matter if any of the regimes is over or not.

Green LEDs should blink during the Active phase.

Each LED is connected only with its channel.

LED 1 – Channel 1.

LED 2 – Channel 2.

During the Passive phase of the Channel - the corresponding LED will be constantly ON (no blinking).

If during switching ON the Bio-Cor there was no inductor on one of the Channels then this Channel will not be working. If only 1 inductor is connected – then only this inductor will work.

In order to work with both Channels you have to connect both external inductors and then switch the Bio-Cor ON.

If during work of the device one of the inductor has disconnected – the corresponding LED will stop blinking. As soon as connection will be reestablished the LED will start blinking again.

## About Binaural beats

**Binaural beats**, or binaural tones, are auditory processing artifacts, or apparent sounds, caused by specific physical stimuli. This effect was discovered in 1839 by Heinrich Wilhelm Dove and earned greater public awareness in the late 20th century based on results that binaural beats could help induce relaxation, meditation, creativity and other desirable mental states. The effect on the brainwaves depends on the difference in frequencies of each tone: for example, if 300 Hz was played in one ear and 310 in the other, then the binaural beat would have a frequency of 10 Hz.

The brain produces a phenomenon resulting in low-frequency pulsations in the amplitude and sound localization of a perceived sound when two tones at slightly different frequencies are presented separately, one to each of a subject's ears, using stereo headphones. A beating tone will be perceived, as if the two tones mixed naturally, out of the brain. The frequencies of the tones must be below 1,000 hertz for the beating to be noticeable. The difference between the two frequencies must be small (less than or equal to 30 Hz) for the effect to occur; otherwise, the two tones will be heard separately, and no beat will be perceived. Binaural beats are of interest to neurophysiologists investigating the sense of hearing. Binaural beats reportedly influence the brain in more subtle ways through the entrainment of brainwaves and have been reported to reduce anxiety and to provide other health benefits such as control over pain.

## About EHF influence

Bio-Cor device generates electromagnetic field of Extremely High Frequency (EHF) in the millimeter gigahertz range with a very low intensity.

Most widely used in former USSR nations, low intensity (usually 10 mW/cm<sup>2</sup> or less) electromagnetic radiation of extremely high frequency (especially in the range 40 - 70 GHz, which corresponds to wavelength of 7.5 - 4.3 mm) is used in human medicine for the treatment of many types of diseases. This type of therapy is called Millimeter Wave (MMW) Therapy or Extremely High Frequency (EHF) Therapy. More than 10 000 devices are used for Millimeter Wave Therapy worldwide and more than a million people have been successfully treated with millimeter wave therapy during its documented history. Established in 1992, the Russian Journal *Millimeter waves in biology and medicine* is dedicated to the scientific basis and clinical applications of Millimeter Wave Therapy. More than 50 issues of it have been published.

## Spheres of Application

Bio-Cor influence is based on using music and frequency to enhance health. It is used to promote mental and emotional health; it may also help improve quality of life for people coping with physical health conditions. The goals include relief of stress or anxiety, improvement of mood, and enhancement of quality of life for people.

People do not need to have any musical ability to benefit from music therapy.

Research shows that Bio-Cor therapy may help ease stress and anxiety, help to fight depression. Results showed that music listening with Bio-Cor inductions had a beneficial effect on blood pressure, heart rate and respiratory rate. Bio-Cor therapy directly influences cell structure and harmonizes functional state of



the body. As demonstrated by extensive research in Russia, 10 minutes treatment by night tremendously contributes to the well-being of a person.

In order to visualize and quantify the effect of the Bio-Cor therapy you can conduct scans in the Bio-Well Software before and after the Bio-Cor session.

***Disclaimer: Bio-Cor is not a medical device; it is not intended for treatment, only for stress reduction.***