

# Optimizing use

This user guide explains how to use the system's programs for different uses and thus get the best results from its use.

The BioBalance features include:

- Maximum intensity of five gauss for the large pad applicator and 10 Gauss for the pillow applicator.
- A large color display
- The ability to use the whole body pad at the same time as a local pad
- AC or battery operation
- 6 individual programs
- Sweep Rife-like program that gives the body multiple frequencies to choose from
- Capability for future software updates
- Up to 12 hours of continuous operation on AC
- Up to ~6 hours of continuous operation on battery mode at maximum intensity
- On-the-fly intensity adjustment



# Unique BioBalance waveforms

- Based on experience with a previous PEMF system, found to have a very dynamic action, several of the waveforms have been reproduced
- There is a basic carrier signal in 3 of the 6 programs
- Providing 300, 400, 600, 800, 1000 Hz
- All these frequencies are present continuously
- Each of these programs is adjusted [modulated] for each of the 3 programs.

# Value of combining waveforms

Research shows that higher frequency modulated signals provide more stimulation to the cells and tissues because they carry more energy for the power produced by the control unit

Since magnetic field intensities drop off rapidly the deeper they have to go into the body, a lower intensity system like the BioBalance will deliver more usable energy deeper into the body because of the modulation

When these are combined with specific individually run lower frequencies the modulated lower frequencies are "seen" better by the body

# The programs

- Balance
- Alert
- Relax
- Sleep
- Recovery



• Sweep

#### Balance

Frequencies: 7.8 Hz - Theta band

7.8 Hz is called the Schumann resonance, the average electromagnetic resonance of the ionosphere of the planet.

This is the planetary frequency by which the brain is most consistently stimulated.

Theta band is a great frequency for

- meditation,
- relaxation,
- light sleep,
- for healers,
- pre-performance jitters
- just generally mildly quieting down the brain.

If one doesn't know what program to choose, this is my number two choice behind the recovery program.

#### Alert

Frequencies: 13 – 23 Hz – Beta band

User frequencies are spread out evenly over the course of the chosen treatment time

Beta band is the frequency of the brain in an alert state.

In this state we are wide-awake, learning, thinking, judging, memorizing, reacting quickly, integrating our thoughts, and many other functions.



We do not recommend this program before bedtime.

Program five is like a cup of coffee without the caffeine – it makes you alert but not over-revved or over-stimulated.

#### Relax

Frequencies: 13 – 4 Hz – descending from alpha through theta band

User frequencies are spread out evenly over the course of the chosen treatment time

Useful program for basic relaxation, "wind me down" program that

combines the benefits alpha band and theta band.

Alpha band is the resting state of the brain good program for those who are hyper, anxious, restless, attention lacking, etc.

#### Sweep program

Sweep is designed to give the body multiple frequency choices

We don't always know which frequencies the body needs at any given time. The body will listen to whichever frequencies it needs.

Some frequencies are ignored and some are listened to each time a sweep program is run, different frequencies are likely to be "heard", activating the cells that "hear" them.

This way many cells can be activated with each sweep – this is like a having a banquet vs a single food.

Think of it this way – it is like a rainbow. Each color is a frequency, many colors gives you a choice of frequencies. You never get bored with a rainbow.



### **Choosing programs**

- Late evening to wind down use the **Relax** program or the balance program
- Bedtime use the Sleep program
- Early morning use the Alert program
- Afternoon pickup use the Alert program
- **General tune-up** use the **Sweep** program [this can be repeated several times]
- Pain *irritating type* use **Balance** or **Recovery**
- Pain that makes you feel dopey or depressed use the Recovery or Alert program
- Almost **anything** that requires healing **Recovery** program



# **General suggestions**

When first starting to use the system it's best to start with *10 minutes* and *Intensity 2.* 

Increase the *Intensity* and the *Time* according to how much you feel you can tolerate.

If one is basically very healthy, maximum time and intensity could be started right away. Small, thin people, children and animals may be more sensitive. Larger people may require higher intensities right away.

Every program will provide benefit. You can't make a wrong choice.

Because the system is low intensity, most of the time you will use the maximum intensity to get the most benefit

The best sleep will be provided by all night use of the whole body pad or the pillow applicator. Trial and error will help you choose which pad works best.

Because the pillow applicator is the strongest, this would be the best for treating local issues

If there are problems in many areas of the body than the whole body pad would be best.

If sleep is disturbed by aches and pains in multiple areas, the whole body pad would be best.

For acute problems, treatments may be necessary for longer periods of time. There is no limit to how much treatment time the system can be used. BioBalance PEMF can't be used to excess.



# Sensitivity

The only exception to maximizing magnetic field exposure would be for people who have very significant sensitivity to medications, chemicals, sounds, light, or magnetic fields.

In this situation the rule of thumb is to go low and slow with limited time of exposure.

Going low and slow means using lower intensities to begin with, gradually increasing them.

How quickly the intensity and the time are increased will depend on individual reactions.

There is no hard and fast rule on this.

#### If there is a concern about possible sensitivity -

#### Increase the intensity and the time for any program as follows:

- 10 minutes and intensity 2
- 20 minutes and intensity 4
- 30 minutes and intensity 6
- 40 minutes and intensity 8
- 60 minutes and intensity 10
- Unlimited time and intensity 10



#### Deeper Insight into our Broadband Waveform

Modulation: to send message signal over a long distance, when the frequency is low , energy will be obviously low.

If you were to apply the same telecom techniques (modulation for example) in the case of an underwater channel you would be dealing with mechanical waves where you can "jump" from one frequency to the next without having to spend more energy to produce it.

Effectively though, high frequency waves do not propagate as far as low frequency waves and you would have to "boost them" but that's something to do with the characteristics of the propagation of the wave in that medium not the physics of producing a mechanical wave at some frequency as it happens with producing an electromagnetic wave.

To increase the energy of the signal we need to increase the frequency. This is achieved by multiplying the message signal with the carrier signal (with high frequency).

The big question is, why have carrier waves in modulation at all? Why not simply use the input signal directly? After all, it is carrying all the information that we're interested in and it only occupies a few kilohertz and bandwidth. So why not use it directly? Why are carriers and modulation needed at all?

Interestingly, the input signals could be carried (without a carrier wave) by very low frequency electromagnetic waves. The problem, however, is that this will need quite a bit of amplification in order to transmit those very low frequencies. The input signals themselves do not have much power and need a fairly large antenna in order to transmit the information.



In order to keep communication cheap and convenient and require less power to carry as much information as possible, carrier systems with modulated carriers are used.

Since the wavelength of the (electromagnetic) wave is inversely proportional to the frequency, the higher the frequency, the smaller the antenna. For example, the wavelength of a 1 GHz electromagnetic wave in free space is 30 cm, whereas a 1 kHz electromagnetic wave is one million times larger, 300 km, which would make for an impractically huge antenna and transmitter power to transmit signals of that frequency!

We hope you found this guide useful. Please do not hesitate to reach out to us with questions or feedback, contact us via our website: <u>https://biobalancepemf.com/</u>