**Brain Waves – what they are and what they do?**

**Beta**

Alertness  
Concentration  
Cognition

You are wide-awake, alert. Your mind is sharp, focused. It makes connections quickly, easily and you're primed to do work that requires your full attention. In the Beta state, neurons fire abundantly, in rapid succession, helping you achieve peak performance. New ideas and solutions to problems flash like lightning into your mind. Beta training is one of the frequencies that biofeedback therapists use to treat Attention Deficit Disorder.

Beta-centered programs help you prepare to take an exam, play sports, give a presentation, analyze and organize information and other activities where mental alertness and high levels of concentration are key to your success.

Beta waves range between 13-40 HZ. The Beta state is associated with peak concentration, heightened alertness, hand eye coordination and visual acuity. Nobel Prize Winner Sir Francis Crick and other scientists believe that the 40HZ beta frequency used on many Brain Sync tapes may be key to the act of cognition.

**Alpha**

Relaxation  
Visualization  
Creativity

When you are truly relaxed, your brain activity slows from the rapid patterns of Beta into the more gentle waves of Alpha. Your awareness expands. Fresh creative energy begins to flow. Fears vanish. You experience a liberating sense of peace and well-being. In biofeedback, Alpha training is most commonly recommended for the treatment of stress.

Alpha-centered programs help you tap your creativity and are excellent for problem solving, finding new ideas and practicing creative visualization. Choose Alpha programs when you want to attain deep levels of relaxation that are so essential to your health and well-being.

Alpha waves range between 7-12 HZ. This is a place of deep relaxation, but not quite meditation. In Alpha, we begin to access the wealth of creativity that lies just below our conscious awareness - it is the gateway, the entry point that leads into deeper states of consciousness. Alpha is also the home of the window frequency known as the Schuman Resonance - the resonant frequency of the earth's electromagnetic field.
Going deeper into relaxation, you enter the elusive and mysterious Theta state where brain activity slows almost to the point of sleep, but not quite. Theta is the brain state where magic happens in the crucible of your own neurological activity. Theta brings forward heightened receptivity, flashes of dreamlike imagery, inspiration, and your long-forgotten memories. Theta can bring you deep states of meditation. A sensation of "floating." And, because it is an expansive state, in Theta, you may feel your mind expand beyond the boundaries of your body.

Theta rests directly on the threshold of your subconscious. In biofeedback, it is most commonly associated with the deepest levels of meditation. Theta also plays an important part in behavior modification programs and has been used in the treatment of drug and alcohol addiction. Finally, Theta is an ideal state for super-learning, re-programming your mind, dream recall, and self-hypnosis.

Theta waves range between 4-7 HZ. Theta is one of the more elusive and extraordinary realms we can explore. It is also known as the twilight state which we normally only experience fleetingly as we rise up out of the depths of delta upon waking, or drifting off to sleep. In Theta, we are in a waking dream, vivid imagery flashes before the mind's eye and we are receptive to information beyond our normal conscious awareness. Theta has also been identified as the gateway to learning and memory. Theta meditation increases creativity, enhances learning, reduces stress and awakens intuition and other extrasensory perception skills.

Long, slow, undulating. Delta is the slowest of all four brain wave frequencies. Most commonly associated with deep sleep, certain frequencies in the Delta range also trigger the release of Human Growth Hormone so beneficial for healing and regeneration. This is why sleep - deep restorative sleep - the kind that Delta frequencies help induce is so essential to the healing process.

Delta is the brain wave signal of the subconscious, the seat from which intuition arises. That means Delta-based programs are not only an ideal choice for their sleep and deep regeneration potential, but also when you want to access your unconscious activity and help that wellspring of information flow to your conscious mind for clearing and for empowerment. Delta waves range between 0-4 HZ.