

Track one: Inner Mind 30:45

Track two: Outer World 30:11

## GAMMA MEDITATION SYSTEM

**Dr. Jeffrey Thompson**

You are about to explore a cutting edge technology. It is based on the principles of brainwave functions, the process of brainwave entrainment, the latest advances in psychoacoustic 3-D recording processes, and the newest research into a brainwave state called *Gamma* that has been recently added to the classic widely accepted brain state categories of Beta, Alpha, Theta and Delta.

### THE GAMMA BRAINWAVE STORY

Each of these brainwaves has a specific frequency, and each is associated with a specific state of consciousness.

The advent of new technology however, recently led researchers at the University of California in San Diego to discover a brainwave pattern they hadn't seen before. The frequency of this newly discovered brainwave, called GAMMA, was measured at 40 Hz (cycles per second). The researchers discovered that this new GAMMA brainwave pattern was associated with a neurological phenomenon called *Binding*. This is the process by which the brain gathers and integrates the information that arrives from all of our senses, binding them into a coherent whole. This synchronizes and coordinates all of our conscious perception, helping us to clarify the information and make sense of the world around us.

More recently Richard Davidson, a neuroscientist at the University of Wisconsin-Madison's new \$10 million W.M. Keck Laboratory for Functional Brain Imaging and Behavior, had the opportunity to test, through the cooperation of the Dalai Lama, the brain patterns of a group of Tibetan monks while they were in states of deep meditation. For this study the monks were asked to meditate on the idea of "loving compassion."

Results showed the brainwaves activated in the brains of the monks in significantly different ways than those of the control group. Most importantly, the electrodes measured large amounts of GAMMA waves in the monks, and found that the movement of these waves through the brain was better organized and coordinated than in the control group.

In additional GAMMA studies, mental activities such as focus, memory, and learning have been associated with this same kind of neural activity in monks. GAMMA waves found in monks have also been associated with the knitting together of disparate brain circuits, associated with states of higher mental activity and higher awareness.

What this all means is that this newly discovered brainwave pattern –GAMMA- is associated with several powerful states of consciousness including:

- Deep Meditation
- Heightened perception and mental acuity
- A sense of connection with the world around you
- Deepened compassion and loving kindness
- Enhanced self-awareness
- Clarity of mind

By utilizing a collection of pioneering psychoacoustic processes that I have developed, including brainwave entrainment, specifically processed nature sounds, 3-D recording, and non-linear music, the *Gamma Meditation System* program can help you experience this powerful state of consciousness. For you to get the most out of this program, however, it is important to understand what brainwaves are and how they relate to various states of consciousness.

### BRAINWAVES AND STATES OF MIND

During a normal day, we all moved through various states of consciousness. Sometimes we are awake and alert, other times we are meditative and relaxed, and usually we end our day in a state where we are asleep and dreaming. Each of these states has a unique pattern of brainwaves associated with it.

Brainwaves are electromagnetic waves produced by the electrical activity of the brain. These waves can be measured with a sensitive electronic instrument called an electroencephalogram, or EEG. The frequencies of these electrical waves are measured in cycles per second, or hertz (Hz). Brainwaves change frequencies based on neural activity within the brain and are closely tied to changes in states of mind or consciousness.

Measuring brainwaves show that our states of mind fall into various classes. The most commonly known are: **Beta** (30-13 Hz), **Alpha** (13-8 Hz), **Theta** (8-3.5 Hz), and **Delta** (3.5-0.5 Hz). Beta waves are associated with ordinary consciousness and linear, step-by-step thinking. Alpha waves are produced as your mind moves from the external to the internal world, such as when you close your eyes and relaxed deeply. Theta waves are associated with dreaming and creativity. Delta waves are the brainwaves that are produced during the deepest states of restorative sleep. It is now generally accepted that **Gamma** (30-85 Hz, centered at 40 Hz), is an additional category of brainwaves. Gamma waves are associated with states of expanded consciousness, deepened compassion, and heightened self-awareness.

### BRAINWAVE ENTRAINMENT

The brain tends to match its own waves pulses to those of exterior sound pulses, a phenomenon known as “acoustic brainwave entrainment.” Research has shown that specific states of consciousness can be induced through hearing sound pulses that match the brainwave frequency of that particular state of mind. Based on this scientifically tested principle, inaudible sound frequency patterns are woven into every soundtrack on the *Gamma Mediation System* recording. When your brain senses these hidden pulses,

your brainwaves will tend to match them, enhancing your ability to enter into a deeply meditative state.

The brainwave entrainment pulses woven into the *Gamma Mediation System* soundtrack are at a frequency of 40 Hz. These specific pulses will entrain your brainwaves to the GAMMA brainwave frequency.

Listening repeatedly over time, however, creates a “learned psychological response” in the nervous system. Anchoring this state with regular listening will train your brain to more easily access your deepest capacities and abilities whenever you need them.

Remember, this recording is not creating a specific state in your brain. It is merely enhancing your ability to more easily access a natural meditative state of consciousness. You should view it as “stacking the deck” in your favor.

#### NATURE SOUNDS FOR THE MIND

Although there are nature sounds on this recording, they are all processed in such a way that you may not “hear” them on a conscious level. Changing octaves, accelerating and slowing the sounds, and passing them through complex filters ensure that they will be recognized only by the unconscious mind. Electronically altering these natural sounds in this way can produce strong physical and psychological responses, and can increase your brain’s ability to experience a meditative state of mind more quickly and easily.

#### 3-DIMENSIONAL RECORDING PROCESSES

The music and nature sounds in this audio program are especially powerful because of the extraordinary three-dimensional recording techniques I use. Instead of recording sounds with only two microphones, resulting in a simple stereo effect, I record using several clinically developed 3-D microphones placed strategically on the body. These recordings authentically reproduce the environment of the sound and the interaction of sound waves with both the ears and the rest of the human body. As you listen, the sounds move around, above, below, and in some cases even seem to move through your body.

#### THE MUSIC

As a clinical physician, researcher, musician, and explorer of spirit and consciousness, I have spent many years investigating techniques for using music and sound to enhance healing, creativity, learning, relaxation, meditation, and spiritual awakening. In that pursuit, I have explored and discovered brainwave states associated with various types of meditation and spiritual practices and created musical soundtracks to enhance those states of consciousness.

The type of music used to induce a deep meditative state must be different than anything normally associated with a regular musical soundtrack, so I created a new musical form for this meditative work. I call it “Non-Linear Music.” It’s a 3-D musical sound environment that allows the mind to become centered, quiet, and focused.

Add On this recording, I have also added three sounds of Tibetan singing bowls played at various speeds. Some of these bowl sounds have been slowed to the point where they mimic what a 60-foot diameter bowl would sound like. I was inspired to use the Tibetan bowl sounds by the Dalai Lama and the Tibetan Buddhist monks who volunteered in some of the studies that helped us to understand the Gamma meditation mind state.

## HOW TO USE THE GAMMA MEDITATION SYSTEM

To benefit fully from this recording, sit directly between your stereo speakers or use headphones. This will help you to take full advantage of the Psychoacoustic 3-D recording techniques.

### TRACK 1: INNER MIND

This track is designed to help you connect with your inner world and enter a state of deep meditation, heightened self-awareness, and expanded consciousness. If you already use a specific meditation technique, listen to this soundtrack while you do your regular practice. It will help you move more deeply into a meditative state. Listening to this recording while doing yoga or other meditative exercise can deepen your experience. If you aren't sure how to meditate, the simple instructions below may be helpful.

First, you want your body to be very comfortable. Wearing loose-fitting clothing, especially at your neckline, and taking off your shoes are both helpful. You will want to assume a position in which you will be comfortable for at least 30 minutes. This could be a traditional meditative posture with legs crossed, sitting on a pillow on the floor, or you can simply sit on a couch or chair with your feet on the floor. Keep your spine as erect as possible, even if this requires you to place a small pillow behind the small of your back. Next, while the music is playing, start to become aware of your breathing. Allow it to slow down gradually. As you inhale through your nose try to focus on breathing into your abdomen, feeling it rise and fall with each breath. Next, allow your focus to rest on the sounds of the music. Let it move you, and take you deeper. Feel your breath slow even further as you gently enter into a state of deep relaxation and meditation.

### TRACK 2: OUTER WORLD

In the GAMMA brainwave studies, the Tibetan monks meditated on the concept of "loving compassion." No audio program can take the place of years of meditative practice, but this track can help you connect with that same meditative state of a deeper connection with humanity. This state is also associated with enhanced mental clarity, heightened perception, and seeing the challenges of your life in a larger perspective.

Listen while you meditate, or use the following visualization exercise to deepen your experience and work on a specific issue.

Prepare as you did for the meditation in track one. Feel your belly expand with each inhale and fall with each exhale. Feel your breath slowing down more as you move gently into a state of deep relaxation. Next visualize an image of a person or problem that challenges you. Visualize the physical place in which you encounter that person or problem and simply observe the place, person or problem, without judgment. Imagine a

golden light surround and permeating you and all you see. Imagine that this light is filled with an emotion of compassion and understanding. Now move outside that place and view it from the surrounding environment, again allowing the compassion-filled golden light to surround and permeate all you see. Continue moving outward and view it from the edge of the Earth, and then from the deep endlessness of space. Rest in this golden light of compassion and understanding. Breathe deeply, trusting that your deeper wisdom will give you the answers and insight that you need.

Listening to the *Gamma Meditation System* as part of a regular meditative practice will help you train your brain to go to the GAMMA mind state. Once there you can draw upon your capacities for deepened compassion, mental clarity, and heightened self-awareness.

#### ABOUT THE COMPOSER

Dr. Jeffrey Thompson began experimenting with sound and its effects on the body and brain in 1981 at his Holistic Health Center in Virginia. In 1988 he moved to California and established the Center for Neuroacoustic Research in Encinitas, California. His clinical research with thousands of patients over the years had led to groundbreaking discoveries in how sound frequency patterns built into musical sound tracks induce brainwave entrainment. He has been a pioneer who has contributed generously to the field of sound, sound healing and personal transformation. As a faculty member, Dr. Thompson taught his courses in behavioral psychoacoustics and neuroacoustic therapy for many years. His courses were accepted by the State of California for core curriculum for Master and Ph.D. programs in clinical psychotherapy. He continues to teach through presentations at conferences, at workshops and seminars held at the Center for Neuroacoustic Research, and as a visiting lecturer at various colleges and programs. Continuing education credits are granted for numerous professions by California and several other states for his seminars and workshops. His method as one of the top alternative healing modalities in the USA in the 1990's was chosen for research at the University of Virginia Medical School and funded through the Center for the Study of Complementary and Alternative Therapies (CSCAT), a USA government program. *Fortune 500* companies, businesses, healthcare professionals, clinics, hospitals, meditation groups, and individuals worldwide use Dr. Thompson's high-tech musical soundscapes for deep relaxation, healing, mega-learning, creativity, inner exploration, and meditation.