



About emWave™ Personal Stress Reliever

Introducing emWave Personal Stress Reliever, an entertaining stress relief technology to help you balance your emotions, mind and body. This scientifically validated, handheld stress reliever was carefully developed by Doc Childre, founder of the Institute of HeartMath (IHM) and CEO of Quantum Intech, and a team of top scientists and engineers, using the Institute's 15 years of innovative research on the relationship between the heart, stress and emotions.

Stress creates incoherence in our heart rhythms. However, when we are in a state of high heart rhythm coherence the nervous system, heart, hormonal and immune systems are working efficiently and we feel good emotionally. emWave Personal Stress Reliever helps you reduce your emotional stress by displaying your level of heart rhythm coherence in real time. But emWave does more than just display coherence levels. It guides you toward stress relief by training you to shift into a coherent, high performance state.

Simply stated, more coherence equals less stress.

Using colorful LED displays, audio feedback, the emWave breathing pacer and an instructional stress relief technique on how to generate positive emotions will improve your coherence level — sharpening your ability to reduce stress and increase vitality, mental clarity and emotional balance.

The emWave Personal Stress Reliever also comes with the Coherence Coach™ CD, an entertaining stress relief software application that teaches HeartMath's Quick Coherence® technique for stress relief and increasing performance. Step-by-step, through narration, animations and music, the Coherence Coach gives you the stress relief training to increase coherence levels while using your emWave.



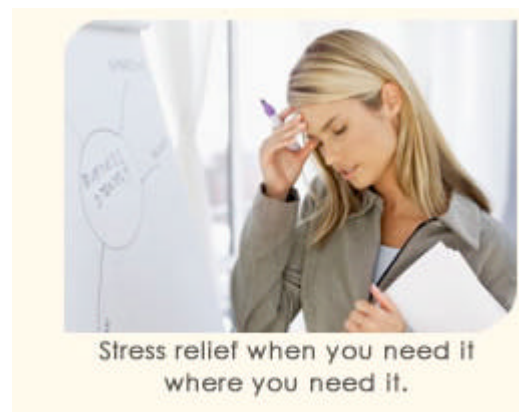
emWave Personal Stress Reliever provides a handheld, portable and convenient way to reduce stress, balance emotions and increase performance anytime, anywhere. It is especially useful when preparing for highly stressful meetings, for improving sleep, to improve athletic performance, to overcome the effects of stress associated with health issues or to recover quickly from stressful situations.

How emWave Reduces Stress and Creates Coherence

EmWave Personal Stress Reliever will help you reduce the negative effects of stress, allowing you to experience greater health, more energy, and improved emotional balance and mental clarity. The “em” in emWave stands for empowerment; emWave empowers you to shift your emotional state and experience stress relief.

The emWave is based on hard science and incorporates the same patented HRV measurement and coherence scoring process found in the Freeze-Framer® Interactive Learning System, HeartMath's award winning PC based product that is being used by ten's of thousands of people in over 50 countries.

Here's why it works. emWave shows the effects of stress on your body by measuring the subtle changes in your heart rhythms. This type of measurement is known as heart rate variability analysis or HRV. The analysis of HRV is recognized as a powerful, non-invasive measure that reflects heart-brain interactions and autonomic nervous system dynamics, which are particularly sensitive to changes in emotional state.



However, emWave does a lot more than just show the effects of stress on your body. It reduces stress by training you to create more “coherence.” Coherence is a term used by scientists to describe a highly efficient physiological state in which the nervous system, cardiovascular, hormonal and immune systems are working efficiently and harmoniously. Coherence is a state very similar to what athletes experience when they are in what is called “The Zone”.

Heart Rhythms and Coherence

When you experience stressful emotions such as tension, anxiety, irritation, or anger, your heart rhythm pattern becomes irregular and incoherent (see figure 1), which negatively affects health, brain function, performance and your sense of well-being.

When you are experiencing positive emotions such as appreciation, care, joy or love, your heart rhythm pattern becomes more ordered and coherent. (See figure 2.) Ordered and harmonious heart rhythms are an indicator of your “coherence level”. High coherence is a state associated with positive emotional attitudes which send signals to the brain that reduce stress, improve brain function, hormonal balance, immune response, coordination and reaction times. emWave determines the degree of coherence found in your heart rhythm patterns and displays changes in real-time on a large tri-colored LED--the Coherence Level Indicator.

- A red light indicates low coherence, which would be normal.
- A blue light indicates medium coherence, which shows good improvement
- A green light indicates high coherence the optimal high performance, stress-free state.



Figure 1: heart rhythms when stressed

The goal in using emWave is to reduce stress by achieving and sustaining High Coherence (green). The Coherence Coach CD (included) provides instruction on how to do the Quick Coherence™ Technique to improve your coherence scores with emWave.

emWave is easy to use. Simply place your thumb on the sensor or attach the Ear Sensor. After your pulse is detected a breathing pacer which synchronizes to your heart rhythms begins. As you practice the Quick Coherence Technique, breathing with the pacer while at the same time activating a positive feeling like the care you have for someone or the appreciation you have for the good things in your life, your coherence level (indicated in a large colorful LED) will begin to change from red to blue to green.

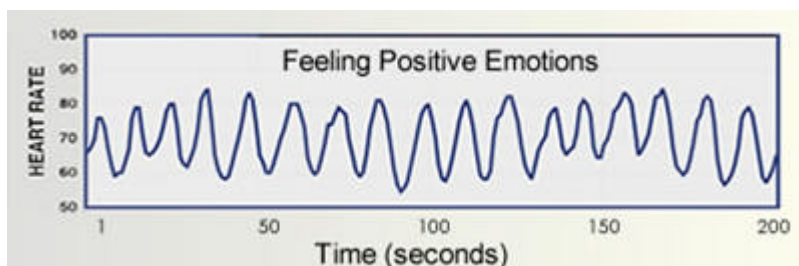


Figure 2: heart rhythms when feeling a positive emotion

emWave offers four challenge levels to help you sharpen your coherence building skills. You can change the brightness of the LED displays and the audio feedback level. Additionally, it incorporates an accumulated coherence scoring display so you can track your progress during a session and an advanced user mode.

For most people in today's high stress world, it is rare for sustained periods of coherence to occur. Now with emWave Personal Stress Reliever you have a convenient, practical way to help you reduce stress and shift into a higher state of

coherence anytime, anywhere. Your stress will diminish and your feelings of well-being, balance and enhanced energy will increase.

About Stress and the Health Effects of Stress

Definition of stress?

Stress has become the number one malady of our time. The constant pressure associated with living in a fast-paced world has created an environment where nearly everyone feels the effects of stress.

Stress is a term used to describe the wear and tear the body experiences in reaction to everyday tensions and pressures. Change, illness, injury or career and lifestyle changes, are common causes of stress, however, it's the effects of stress, like pressure and tension, that we feel in response to the little everyday hassles—like rush hour traffic, waiting in line, and too many emails—that do the most damage.

Stress is the body and mind's response to any pressure that disrupts its normal balance. It occurs when our perception of events doesn't meet our expectations and we are unable to manage our reaction. As a response, stress expresses itself as resistance, tension, strain or frustration that throws off our physiological and psychological equilibrium, keeping us out of sync. If our equilibrium is disturbed for long, the stress can become disabling and create numerous health problems.



Stress and the effects of stress are often misunderstood. We look at outside events as the source of stress, but in fact stress is really caused by our emotional reactions to events. The stress we experience in today's world often goes unnoticed and unmanaged. Many people have simply adapted to stress in an unhealthy way, resigned to thinking it's "just the way it is". Unfortunately, lack of stress management has created a pandemic of low-grade anxiety and depression.

Health Effects of Stress?

The effects of stress in people are seen physically, mentally and emotionally. According to the American Institute of Stress, up to 90% of all health problems are related to stress. Too much stress can contribute to and agitate many health problems including heart disease, high blood pressure, stroke, depression and sleep disorders. Additional studies confirm the debilitating effects of stress on our health:

- Three 10-year studies concluded that emotional stress was more predictive of death from cancer and cardiovascular disease than smoking. People who were ineffectively managing stress had a 40% higher death rate than non-stressed individuals.
- A Harvard Medical School study of 1,623 heart attack survivors found that when subjects got angry during emotional conflicts, their risk of subsequent heart attacks was more than double that of those remained calm.
- A 20-year study of over 1,700 older men conducted by the Harvard School of Public Health found that worry about social conditions, health and personal finances all significantly increased the risk of coronary disease.
- Over one-half of heart disease cases are not explained by the standard risk factors, such as high cholesterol, smoking or sedentary lifestyle.
- According to a Mayo Clinic study of individuals with heart disease, psychological stress was the strongest predictor of future cardiac events, such as cardiac death, cardiac arrest and heart attacks.

How to relieve stress?

In order to effectively relieve stress it's important to understand it's not the external events or situations that do the harm; it's how you respond to those stressful events. More precisely, it's how you feel about them that determine whether you feel the negative effects of stress and ultimately relieve stress.

Emotions, or feelings, have a powerful impact on the human body. Emotions like frustration, insecurity and depressing feelings are stressful and inhibit optimal health and relief from stress. Positive emotions like appreciation, care, and love not only feel good, they promote health, performance and well being.

HeartMath's research has shown when you learn how to intentionally shift to a positive emotion, heart rhythms immediately change. A shift in heart rhythms may not seem important but in fact it creates a favorable cascade of neutral, hormonal and biochemical events that benefit the entire body. The stress relief effects are both immediate and long lasting.

emWave™ Personal Stress Reliever™ is designed to help you learn how to change your emotional state and heart rhythms to reduce stress levels and revitalize your entire body.

The Science Behind emWave and Heart Rhythms

The heart is a primary generator of rhythmic patterns in the human body, and possesses a far more extensive communication system with the brain than do other major organs. In addition, the heart plays a particularly important role in the generation of emotion. With every heartbeat, the heart transmits complex patterns of neurological, hormonal, pressure and electromagnetic information to the brain and throughout the body. As a critical nodal point in many interacting systems - physiological, cognitive and emotional - the heart is uniquely positioned as a powerful entry point into the communication network that connects body, mind, emotions and spirit.

Doc Childre and the research team at the Institute of HeartMath (IHM) have shown that techniques which combine intentional heart focus with the generation of sustained positive feelings lead to a beneficial mode of physiological function they have termed psychophysiological coherence.

Correlates of psychophysiological coherence include a sine wave-like pattern in the heart rhythms, increased heart-brain synchronization (alpha rhythms become more synchronized to the heart) and entrainment between heart rhythm patterns, respiration, blood pressure rhythms and other physiological systems. Although psychophysiological coherence is a natural state that can occur spontaneously while people are feeling genuine positive emotions and during sleep, sustained periods are generally rare.



During states of psychophysiological coherence, our inner systems function with a higher degree of synchronization, efficiency and harmony which correlates with improved emotional balance, quality of emotional experience, health, and cognitive performance.

HeartMath studies conducted across diverse populations have associated increased psychophysiological coherence with reduced anxiety and depression, decreased physical symptoms negative effects of stress, enhanced immunity, reduced cortisol and increased DHEA.1-5 IHM has collaborated with Stanford University and other institutions in studies which have shown that heart centered techniques and psychophysiological coherence facilitate the body's healing processes and improve physical health outcomes. For example, improvements in clinical status have been demonstrated in individuals with hypertension, diabetes, congestive heart failure, asthma and AIDS.6-10

The emWave Personal Stress Reliever, is a unique heart rhythm coherence training device. It objectively monitors your heart rhythms and confirms when you are in the coherence mode. It helps you learn to self-generate coherence and track your progress. With practice you learn how to shift into coherence at will, even in difficult situations which previously would have drained your emotional vitality and buoyancy. You will readily see and experience changes in your heart rhythm patterns as you practice emotional stress management techniques. Your heart rhythms generally become less irregular and sine wave-like as you send more heart-felt love and appreciation through your system.

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