The Schumann Frequency is a geomagnetic vibration that has been found on our planet since the advent of time. It consists of standing electromagnetic waves that continuously form at a constant frequency across the earth. Every energy discharge in the ‘cavity’ between the ionosphere and the earth’s surface – every normal lightning strike – produces radio waves as a by-product that provide the energy to maintain this resonance frequency. The Schumann Frequency is named after German physicist Winfried Otto Schumann (1888 – 1972), who deduced the presence of the frequency initially in purely theoretical work (Schumann 1952). A short time afterwards, he was also able to prove its existence with measurements for the first time (Schumann & König 1954). The frequency that was emitted (the base frequency of an entire spectrum of resonance frequencies) amounted to exactly 7.83 Hertz, as had been predicted, and has since been known as the so-called master frequency or ‘heartbeat’ of the earth.

Today it is assumed that, in the evolution of life, a slow adjustment to prevailing geomagnetic waves has taken place - by way of a close symbiosis between the geomagnetic field and the behaviour and well-being of life on earth (Funk, Monsees & Özkuzur 2009). That means nothing less than since the ionosphere has existed on earth, the Schumann Frequency of 7.83 Hz has existed as a base frequency, and has been able to be used by all forms of life as a reference frequency for a range of physiological functions (Aschoff 1954, Glass 2001). The best way to envisage the Schumann Frequency is that it sets the beat of the world’s clock, or is like a quartz crystal in earth’s computer.
Neurobiological studies have shown that the base frequency of the hippocampus, an important area of people’s brains, is found within the range of the Schumann Frequency [O’Keefe & Nadel 1978]. 7.83 Hz has been defined, independently of one another, by NASA, by Rüttger Wever and by biophysicist Dr W Ludwig as a ‘biological norm’, without which man cannot get by. An absence of this frequency can lead to problems with general well-being such as dizziness, headaches, changes in heart rate, breathing difficulties and much more.

Michael Persinger, who conducted research on behalf of NASA, realised during the first manned space flights that the absence of the Schumann frequency outside the ionosphere led to major physiological problems in astronauts, and that this could be solved only by the installation of specially developed Schumann generators (Persinger 1967). Rüttger Wever of the Max Planck Institute in Erling-Andechs carried out a separate series of experiments with volunteers, who lived for a month in a magnetically shielded bunker. Significant changes to circadian rhythms, which constitute a kind of inner clock for the body, occurred. There was a remarkable destabilisation of sleeping patterns, the daily body temperature cycle as well as the level of cortisone in the blood. As soon as those taking part in the experiment were living in a normal environment again, these problems ended. Wever also gained the same positive effect when he installed a Schumann generator in the bunker (Walsh 1968).

**WHAT INFLUENCE DOES THE SCHUMANN FREQUENCY HAVE?**

![Fig. 1: Measurement of the vertical electric field close to the town of Kingston, Rhode Island, USA; Schumann Resonances of 1 to 5 (according to Polk 1982)]
Scientific studies at the California Institute of technology (Caltech) in Pasadena, USA, have proved that the earth's magnetic field directly influences our brain. Magnetite crystals (Fe3O4) have been proven to exist in the human brain which work like magnetic antennas, and with which the earth's magnetic field is recognised by the brain. A team of American researchers have managed to gain proof that such crystals are present in large numbers in the human brain (Kirschvink, Kobayashi Kirschvink & Woodford 1992). Similar biological magnets have been since found in a whole range of different living beings.

Magnetite, also known as iron oxide, reacts more than a million times more to an external magnetic field than any other biological material. Magnetite crystals can, as antenna crystals, also receive relatively weak signals and react to them.

**HOW DOES THE SCHUMANN FREQUENCY WORK?**

Due to massive technological development (which has created electromagnetic pollution) and the rapidly growing use of mobile phones, Wi-Fi, Bluetooth, radio, etc. the Schumann Frequency is being increasingly overridden by vibrations in the nearby area that are often stronger. Our bodies are therefore less and less capable of connecting with this natural clock of the earth. This appears to be the reason that more and more vital processes of the body are being desynchronized (Pike 2011, Mulligan & Persinger 2012), in a similar way to how the first astronauts suffered when going into space. The interference to the Schumann Frequency is similar to proven astronomical interference on earth with the likes of solar storms (Cherry 2002).
It’s here where GENII® has an impact, as a battery-powered electromagnetic vibration generator in the natural frequency range. GENII® generates electromagnetic low-frequency vibrations based on the Schumann wave with various frequency patterns, which were developed over decades of research. GENII® therefore creates, much like a conductor with a baton, the basic rhythm for properly synchronising all the body’s vital processes. Those using GENII® therefore become more resistant to the negative elements in our environment like stress and overload.

The continuously emitted impulses help lead to higher performance and quicker recoveries in everyday life. Important in this context is the aforementioned study by O’Keefe and Nadel (1978), which demonstrated that frequencies in the range of the Schumann Resonance (7.83 Hz) occur in the hippocampus. This brain area is vitally important for all processes involved in attention, concentration and learning, and is found in all mammals. The user can choose between three basic modes with activating, stabilising and relaxing vibration designs. The various frequency patterns, as well as the strength and the shape of the electromagnetic fields generated by GENII®, have been developed in over 50 years of research by a range of prestigious doctors and institutions, and they have been tested and fine-tuned to meet the needs of the human body.
PROVEN POSITIVE EFFECTS OF THE SCHUMANN RESONANCE ON THE HUMAN BODY

- Better sleep and increased well-being by stabilising circadian rhythms [Walsh 1973, Cherry 2002]
- Improved bone formation by stimulating the osteoblasts [Aaron & Ciombor 1996]
- Boosted immunity and cancer defences [Lieberman et al. 2001]
- Normalised blood pressure [Mitsutake et al. 2005]
- Reduced heart attack risk by increased heart rate variability [Lyskov et al. 2001]
- Reduced sensitivity to pain [Eccles 2005]
- Better memory through stimulation of the hippocampus [O’Keefe & needle 1978]
- Improved mental performance by synchronising neuronal rhythms [Rutishauser et al. 2010, Mulligan & Persinger 2012]


Wever, R. (1973): Human circadian rhythms under the influence of weak electric fields and the different aspects of these studies. Int. J. Biometeorol. 17, 227