# **GENERAL SPECIFICATIONS**

**Power Requirements:** 1 amp at 9 to 15 volts DC. 115V AC wall adapter is supplied to derive DC voltage. Pigtail on request.

Weight: 2 lbs. for single-coil unit. Increase by .25 lb. for each coil added.

**Dimensions:** 9.5 inches tall by 4.5 inches in diameter. Support bumper adds .375 inch.

## Conductance:

**One Coil:** 1 x 10 E12 MHO equivalent shunt conductivity **Two Coil:** 1.414 x 10 E12 **Three Coil:** 1.707 x 10 E12 **Four Coil:** 2.000 x 10 E12

## Maximum Field Input:

One Coil: 100 millivolts/square meter Two Coil: 141 millivolts/square meter Three Coil: 170 millivolts/square meter Four Coil: 200 millivolts/square meter

Minimum Field Input: Measurable to 1XE-12 volts per square meter

#### Effective Coverage Area:

One Coil: 20,000 square feet (when field does not exceed 10 millivolts per square meter) Two Coil: 28,280 square feet Three Coil: 34,641 square feet Four Coil: 40,000 square feet

**Magnetic Opposition:** Equivalent to a value of 1 h(oersted) in an area of 20,000 square feet (grid line nulling)



P.O. Box 4158, Santa Fe, NM 87502 *Showroom:* 3201 Richards Lane, Suite A *Toll-free:* (800) 497-9516 *Local:* (505) 982-2688 www.cutcat.com

# **TOTAL SHIELD**

# FOR ELECTROMAGNETIC AND GEOPATHIC DISTURBANCES



- Balanced earth resonance accurate to .005 Hz
- Engineered to run through a lifetime of use
- Unparalleled versatility and function
- Choice of three function modes

The Total Shield is solely intended for your personal experimentation with 7.83 Hz (Schumann Resonance). No medical claims are made or implied. For any physical problems that you believe are caused by exposure to electropollution, consult your healthcare practitioner.

# WHAT IS HAPPENING TO EARTH'S NATURAL MAGNETISM?



Scientists have documented that the Earth's field periodically waxes and wanes. Geological evidence indicates this building and diminishing of the Earth's field is tied to a planetary polar shift every million years or so. A full 5% decline has been recorded in the last 100 years. Technology is the major disruptive factor in our balance with the Earth's naturally occurring resonance and magnetism. Much in the same manner as the ozone layer and the oxygen content of our atmosphere are being depleted, the Earth's natural magnetism is being disrupted.

# WHY DO I NEED THE TOTAL SHIELD?

The Magnetic Field: All living things have become tuned to the status quo in the magnetic field of the earth. To have the field change and stay at the changed level would not normally cause a problem in the living cell. This does actually occur as the earth rotates in its orbit about the sun. The slight tilt of the earth's axis creates a corresponding change in magnetic intensity; our bodies have learned to handle this. The technology of modern society has created situations where magnetic field intensity has become a variable. Walking past a household appliance such as a washing machine when it has a solenoid energized will put you in an area where the magnetic intensity is different. Depending upon the phase of the solenoid that is on, magnetic intensity could be either higher or lower. What matters is that the intensity is different. To compound the problem, two or more solenoids may be pulled in alternately. The washing machine is just one example. Other products around us will act the same way--to name a few: a toaster, an electric alarm clock, a power line in the wall. Reactions to the changing magnetic intensity vary from mild to extreme. In plants you may see stunted growth, little or no yield, mutations or simply refusal to grow.

With domestic livestock and poultry, the reactions to changing magnetic intensity will, as with plants, vary from mild to extreme. Mass suicides have been observed in poultry during severe electrical storms. These more severe storms will cause the magnetic field intensity to become almost an alternating field due to the rapid change. During this time, poultry will actually pile in a large heap with each layer, causing the layer below it to suffocate. In other cases, chickens will not eat

# HOW DOES THE TOTAL SHIELD ACT ON MAGNETIC, ELECTRIC AND GEOPATHIC FIELDS?

Scientists and engineers are familiar with the term "smoothing choke." This is an item that smooths out the fluctuations in current that are caused by varying loads. When current makes a sudden increase, the choke will slow down the change. When current makes a sudden decrease, the choke will supply additional current. A flow of current through a conductor creates a magnetic field. If you place a second conductor next to the first one and send an equal current in the direction opposite to the first one, it too will create a magnetic field. The two fields will be of opposite direction and will therefore cancel out each other.

In a similar manner, the Total Shield acts as a smoothing choke when the function switch is in the GW position. An internal network detects the magnetic and electric field fluctuations. The waves are reversed by 180 degrees and the changes are rebroadcast; the field changes now oppose each other and are nullified. (You can think of this as analogous to a noise-canceling device.) We do not advise using the Total Shield in the GW function without primary power.

## **OPERATING INSTRUCTIONS**

Simply connect the AC adapter to the Total Shield and plug the unit into a power source. Then select the wave and color settings you want. (See pages 3 and 4 for details on these settings.)

The best location for the unit is in a central part of your house. If you live in a two-story house, put the Total Shield on the floor of the second level in a central location. Just like the waves that are harmful to you, the Total Shield does not need to be seen to be effective. For protection of livestock, place the Total Shield in the barn. In this environment, placing the unit in a plastic bag will extend its life. A corrosive atmosphere will degrade the switches and the power jack on the back of the unit. If primary power is not available, the Total Shield will continue to work in the EP position, although both bandwidth and shunt conductance will be degraded by a minimum of 10 to 1. We do not recommend long-term use without primary power.

We strongly suggest that you plug the Total Shield into a surge protector. Plugging it directly into an outlet can cause the transformer to malfunction if there is a power surge or power failure. during the days prior to and after a solar eclipse. (During this time, the earth's magnetic field will fluctuate greatly.) These reports go on and on, and research continues. It is imperative that we protect ourselves and our animals from the growing environmental hazard.

The graphic below illustrates the broad spectrum of man-made electromagnetism in our environment. Some frequencies shown occur naturally, but man-made sources of electromagnetism exist throughout the entire scale.



#### HOW DOES THE TOTAL SHIELD WORK?

The Total Shield acts as an absorption and neutralizing unit for harmful electromagnetic radiation from power lines, electric blankets, household appliances, computers, low-frequency broadcasting stations, TVs and other electronics, and even solar flares. The device emits the Schumann Resonance, which is the earth's natural magnetic field of 7.83 Hz. The is the field we evolved with long before man-made fields existed.

The Total Shield has three settings: **EP** (Electromagnetic Protection), **GW** (Geopathic Wave) and **Both. EP** (the left position on the bottom switch) is used when the electromagnetic field is much greater than the geopathic field. Typical of a location where you would use EP position would be a household adjacent to an electric power substation or with a lot of electronic equipment. Electromagnetic field levels are extremely high near substations.

**GW** (the right position on the bottom switch) is appropriate where magnetic and electric field intensity changes are more of a problem than electromagnetic waves. Normally this setting would be used in remote rural areas such as the sparsely populated plains areas. These places do not have the high levels of electromagnetic pollution found in states with large populations. Or, you may know that you live in an area with high geopathic waves. These are caused by geological anomalies or water flowing directly underground.

The **Both** setting (the middle position on the bottom switch), which handles electromagnetic and geopathic problems simultaneously, operates these functions in a time-sharing (alternating) mode: EP is on 50 percent of the time and GW function is on 50 percent of the time. This is the setting most often used. It has been noted in laboratory experiments that intermodulation products will cause an apparent frequency shift when two or more frequencies are mixed. Switching between EP and GW at the Schumann rate reinforces the synchronism between you and the earth.

Synchronism to the earth rate is vital for all living things. Without this connection, there is always the feeling that you are a little out of sorts. Irritability and nervousness are sure signs of a loss of connectivity to earth through the earth pulse. The Total Shield broadcasts the earth rate over a large area (20,000 to 40,000 square feet, depending on the model) by using the shunt conductor as a radiating Tesla antenna. It does this when the bottom switch is in the Both or EP position.

# WHAT DO THE COLORS MEAN?

Near the top of the Total Shield is an unmarked switch. This switch is used to select the color for the EP indicator. You can choose red or yellow. In the GW position, only the green light will blink. When in the Both position, the indicators will alternate between red and green or between yellow and green; you can choose the setting. Some people will react to different colors in a negative or positive way and find it helpful to be able to choose the color they want. Because the lights are blinking at the Schumann Resonance, they can be used for stress relief or to help with biofeedback. If you do not want to look at the lights, you can turn the unit toward the wall or place it behind a piece of furniture or other object.

# HOW DOES THE TOTAL SHIELD ACT AS AN ELECTROMAGNETIC ABSORPTION UNIT?

We have set up lab experiments with a piece of equipment that we made for the U.S. Navy. This unit is called the grid dip oscillator/absorption wave meter. This unit produces an electromagnetic wave at any frequency between .05 KHz and 990 MHz. There is a tuning head which has a transmitting coil attached to it. During the course of the experiment, the unit is set to produce and transmit a frequency we will call f(1). A tuned element is placed at a point distant from the transmitting coil of the absorption meter. The tuned element is set to a frequency we will label f(2). We then adjust the tuning of the tuned element. When the adjustment causes f(2) to approach the frequency of f(1), the power produced by the transmitting coil becomes weaker. When the coupling factor is near unity, all of the power produced by the transmitting coil is absorbed by the tuned element, and there is no effective radiation from the transmitting coil. This effect is observed by using a grid dip meter at the output of the transmitting head. The output level goes to zero when the tuned element is set to frequency f(1) with close coupling. Theory places no limit on the power level or the quantity of frequencies that can be neutralized (shunted) by the tuned element. Practical considerations involved are size and economy. Consider that the Total Shield is the tuned element. With a large internal Tesla coil, it is capable of neutralizing most electromagnetic pollution. Because the Total Shield cannot be put close enough to the transmitting source to eliminate it (see above), it functions to dilute the negative fields by flooding an area with the earth's natural resonance, 7.83Hz. In some areas where the unit is overpowered, one or more may need to be added. We also have units with extra coils for exceptionally bad situations such as a high concentration of electrical equipment and people with electrical sensitivity (see back page for sizes).

## **CHARACTERISTICS OF THE TOTAL SHIELD FIELD**

The key to the Total Shield's effectiveness is the presentation of the following four characteristics of the earth-resonant field.

I. A direct current biphasic sine wave, reversing direction on every cycle.



2. Fully polar rotational: alternating around the compass clockwise, then counterclockwise in sequence.



3. Output attenuated to an energetically assimilable level.

4. Predetermined in shape and density, set by a unique design of field emitters. A poor field emitter can make earth resonance an irritant rather than a harmonizing influence. or move around until magnetic intensity returns to a stable level. Cattle, sheep and goats appear to be fine during a storm. However, at the end of the storm, the entire herd will become agitated and very nervous, and they will be off their feed for several days afterward. Similar behavior can be seen in cattle when pastured in a field with high-tension lines transversing the field. Humans also will exhibit abnormal behavior when magnetic intensity changes. Some people will develop a rash; some will become sluggish and fatigued. In some severe reactions, dizziness and nausea will be present until the intensity is stable. Chronic illness and emotional distress are prevalent during periods of magnetic change.

The Electric Field: In addition to the earth's natural magnetic field, there is a natural electric field. As with the magnetic field, we have adjusted to the normal electric field. It is only when this electric field becomes a varying one that living things suffer. Even though the electric field and the magnetic field are closely linked in nature, differing reactions may occur. The static electric field between the cloud layer and earth ground is reasonably constant. When the cloud-layer electron charge increases to a certain point, a lightning bolt will pass from cloud layer to ground. At this point, the electric field breaks down in the area surrounding the lightning bolt. Conversely, the magnetic field will greatly increase in this area due to the high level of electron flow through the atmosphere. When caught in this, you feel first the hair-raising effect of the abnormally high electric field. Immediately afterward, you feel the draining effect of the higher-than-normal magnetic field strength. Lightning is one of nature's ways of producing a third force called the electromagnetic field.

We have discovered ways to produce strong (man-made) electromagnetic waves at frequencies from below 1 hertz to greater than 50 gigahertz (1 GHz is 1,000,000,000 Hz.) Fortunately, only the low frequencies tend to be most harmful to people, plants and animals. Unfortunately, studies have shown that living near high-power lines creates life-threatening problems. In a research report in the *American Journal of Epidemiology* by Nancy Wertheimer, PhD, and Ed Leeper, PhD, they concluded that children living in homes near overhead electrical wires carrying high current died of cancer at twice the rate as children living in homes near low-current wiring. A Swedish researcher at a conference held by the U.S. Department of Energy reported a link between cancer and power lines. The Department of Health has issued guidelines on the amount of time technicians may work on rooftops where radiating devices are located. Talk to medical personnel and they will tell you of increased mental problems observed