



Frequently Asked Questions

What is the Electro-Acuscope/Myopulse System?

How is probe placement determined?

How many treatments will I need?

Please explain why the results from an Acuscope and Myopulse treatment are cumulative.

I have tried many other forms of therapy with little or no relief, can Acuscope/Myopulse treatments help?

Who can give treatments with this equipment?

What is the Electro-Acuscope/Myopulse System?

The Electro-Acuscope, introduced to the public in 1978, is the original (and still the only) electronic medical instrument that delivers gentle treatment to damaged and impaired tissue in feedback-modulated biologically compatible microcurrent transcutaneous nerve and muscle stimulation. In other words, the electricity produced by the Acuscope is an exact match to the electricity of the human Nervous System, and therefore can cause change, producing results by a non-invasive, natural influence.

Unlike most electrical stimulators called TENS (Transcutaneous Electrical Nerve Stimulation), that blindly blast milli-amperage current to block pain signals from reaching the brain, the Acuscope delivers miniscule doses of micro-electricity (the exact level, frequency, intensity, and square waveform patterns that healthy living tissue conducts through the nerve network).

The Acuscope is particularly unique in that its output is precisely configured based on the biological feedback being continuously gathered from the tissue during treatment. The I/O (Input/Output) computerized circuitry is calibrated to calculate appropriate corrective waveform patterns by comparing impedance readings to universal norms, in a process similar to the "search and seek" technology of a missile-guidance system.

After each stimulation, the resulting readouts, both digital (numbers) and auditory (sounds) reflect the changes in conductivity over the course of the treatment (unlike all other electrical stimulation devices that provide no feedback to the operator). Simultaneously, when the sounds and numbers improve, the patient frequently experiences a corresponding reduction in pain and increased range of motion.

The cellular effect of the Acuscope is to boost the body's self-repair mechanisms by adjusting levels of micro-electrical activity, "charging-up" the trillions of cells' energy-producing capacity when depleted; and/or decreasing abnormally over-active signals where chronic inflammation is no longer beneficial to the tissue. Over a series of treatments, the effect is cumulative, until the entire body's neurological network can hold a healthy charge, and normal conductivity throughout the nervous system is restored.

The Myopulse, companion instrument to the Acuscope, gently stimulates specific connective tissue (muscles, tendons, ligaments and fascia) delivering electrical muscle stimulation (EMS) in feedback-modulated microcurrent sinusoidal (sloping) waveform patterns identical to that produced by contractile tissue. Reducing

spasm and inflammation, restoring range of motion, and strengthening tissue damaged by traumatic injury, even in the most acute and chronic cases, the Myopulse produces remarkable results.

Together these two incomparable instruments comprise the most technologically advanced and effective neuromuscular treatment system available to health care practitioners today. As the only self-regulating electrotherapeutic microcurrent devices on the market (feedback signal processing; e.g. the tissue impedance input continuously controls and adjusts the waveform output), this system is used for a wide variety of applications, acceleration of tissue repair, pain and stress management.

How is probe placement determined?

Generally probes are applied to the skin using specially formulated Electrolyte solutions and/or creams to interface the copper/brass alloy tips and plates with the living tissue beneath the contact points.

Throughout the electrical “wiring” of the body, certain points function as signal boosters or amplifiers similar to any system that conducts electricity. Point-specific probes are applied to these strategic high-conductive points, “Acupoints” along the neural pathways (meridians), as well as to Auricular (ear) points, Odonton (gumline) points, Reflex (hand and foot), Trigger (muscle) and according to other protocols.

One can “find/locate” these points of higher conductivity relative to the surrounding tissue by utilizing the Acuscope's readout (digital display and auditory feedback) mode prior to initiating stimulation. One can also locate areas of inflammation relative to immediately surrounding tissue because electrical activity is greater in hot, fluid filled, and/or acute conditions. Tissue impedance values are indicated by the LED (digital) readout in conjunction with the auditory feedback. Acuscope placement electrodes are then strategically placed either on or around the area of involvement.

Myopulse probes are most frequently placed directly over a particular muscle or muscle group. Electrodes may be applied at locations of origin and insertion, or on either side of the “belly” of the muscle. Roller electrodes are very effective in applying the current along the entire length of a muscle, tendon, or ligament in order to release tightness, knots, trigger points, spasm and generally reduce the pain of injury to connective tissue including acute trauma such as sprains and tears. The regenerative, self-repair mechanisms of muscle cells are boosted by the currents applied with the probes and plates of the Myopulse.

How many treatments will I need?

The pain relief which follows each treatment of given area will last longer and longer and each successive treatment will require a shorter amount of time to be effective. This is commonly referred to as “the cumulative effect.”

The number of treatments required will depend on the severity and extent of the condition as well as the body's ability to “heal” itself. Age, general state of health, habits such as nutrition, hydration, posture, habitual activities, repetitive use syndromes, exercise (or lack of it), and even state of mind may influence the length of time required for complete recovery. Somewhere between five and fifteen treatments is the normal average.

Unlike other forms of pain management, such as therapy with certain drugs or higher amperage electrical stimulators, the body does not build up a tolerance to Acuscope/Myopulse treatments. Both with many pain medications and most hi-amp devices, prolonged use requires higher and higher doses of medications or increased time and amounts of electricity to achieve the desired pain reduction effect. With EA/MYO treatments, sessions of shorter and shorter duration produce more dramatic and longer lasting effects, until treatment is no longer required. Periodic maintenance treatments, however, are highly recommended to maintain a healthy state.

Please explain why the results from an Acuscope and Myopulse treatment are cumulative.

In numerous scientific studies, mild current stimulation, ideally at the level of 500 uA (micro-amps) or less, has been proven to have a profoundly beneficial effect on living tissue, promoting regenerative metabolic activity.

One study in particular is most notable (Ngok Cheng, et al: 1976) and is often quoted throughout the literature on microcurrent therapy. This breakthrough study determined that micro-amperage stimulation causes the cells of the body to increase production of the chemical ATP which is responsible for cellular energy production. It was also found to increase protein synthesis, the building blocks of tissue, which allows the cells to begin to repair themselves. This low level of current was discovered to improve certain cellular functions, such as (in technical terms) normalizing the cell membrane gradient by repolarization, opening the voltage sensitive channels that allow ions (such as sodium, calcium, potassium, etc.) to pump more freely into the cells, and to increase the transport of waste products out of the cells thereby assisting the flushing of toxins out of the tissue. (It is therefore recommended that patients increase their intake of fluids, primarily water, during their course of Acuscope/Myopulse treatments.)

As these chemical reactions accumulate with each successive treatment, the tissue is able to repair itself more and more completely. The "charge" on the tissue begins to hold and its ability to produce its own normal energy is restored. In most cases of neuromuscular pathology, a series of treatments have "the cumulative effect" leading to long-lasting or permanent relief.

I have tried many other forms of therapy with little or no relief, can Acuscope/Myopulse treatments help?

Probably; these instruments deliver a different type of treatment than any other form of pain management. It is very often effective where nothing else has been able to help in the past. Ideally treatments are combined with therapeutic massage, Physical Therapy, and/or musculo-skeletal bio-mechanical adjustment, nutritional counseling, appropriate exercise activity, and other healthy lifestyle choices for best possible results.

Who can give treatments with this equipment?

The Acuscope and Myopulse are FDA approved as "Class II" Medical Devices that can be operated under the supervision of, or by referral from, a Medical Doctor, Doctor of Oriental Medicine, Chiropractor, or Naturopath. The operator is often referred to as a bio-technician. In Sports Medicine the system is frequently operated by a Trainer or Physical Therapist. A doctor may also prescribe the home use of this instrumentation with a prescription for TENS. The personal units [Acuscope Model 70C](#) and the [Neuroscope 230](#) are most popular for patient self-care.