

MatrixPulse™ Home Treatment System



Instruction Manual

MatrixPulse™ Home Treatment System Package



Note: This device is not intended for the diagnosis or treatment of any condition or disease.

MatrixPulse™ Home Treatment System



Introduction

The **MatrixPulse™ Home Treatment System** is based on similar technology as that used by your Certified Matrix Repatterning Practitioner for assessment and treatment purposes. It is a precisely controlled form of Pulsed Electro-Magnetic Field (PEMF), which has been found to help reduce pain and stimulate repair in the cells and tissues of the body, especially musculoskeletal tissues including bone, tendon, ligament, muscle, cartilage and nerve tissue. This new PEMF technology (*Inductively Coupled Electrical Stimulation* – or ICES), developed by **Dr. Robert Dennis**, biomedical engineer from the University of Michigan, is the result of his research funded by NASA (National Aeronautics and Space Administration) in the 1990's.

The reason that PEMF helps the body's healing mechanism is due to the fact that every cell in our body is literally a small battery. The electrical output of the cells is generated by the movement of ions (electrically charged particles) back and forth across the cell membrane, much like your car battery. Just like a battery, your cells electrical properties need to be recharged. This is normally accomplished because of exposure to the magnetic field produced by the earth's magnetic core, which is now in an historic decline due to a reversal of the magnetic poles. Check the documentary: "When North Goes South", on the Nature of Things (cbc.ca).

This MatrixPulse™ works as well as it does because it emits very low levels of power through a uniform, well controlled and focussed form of PEMF stimulation. In fact, its output is only about 350 milliwatts (1/3 of a watt) or about a third of the power of a typical cell phone. Its field intensity has a measured maximum of about 130 Gauss (13 mT) and provides a cycle of constantly varying frequencies designed to optimize the effectiveness of treatment.

The MatrixPulse™, developed in collaboration with **Dr. George Roth**, based on his clinical experience using Matrix Repatterning, represents a further evolution in this breakthrough technology. His research found that the electrical properties of the cells were disrupted with injury and that the application of a normalizing electrical field, along with gentle manipulation, could restore these properties and promote tissue healing and significant pain relief.

"PEMFs rev up production of nitric oxide, which increases blood flow to the targeted area. The combo stimulates an anti-inflammatory cascade that not only reduces pain but also reduces swelling and speeds healing. They produce invisible energy waves that increase blood flow and normalize some electrical impulses to and in nerves. Aim PEMFs at the damaged zone for eight to 30 minutes, two to four times a day, and you'll heal better, faster."
Dr. Oz

References:

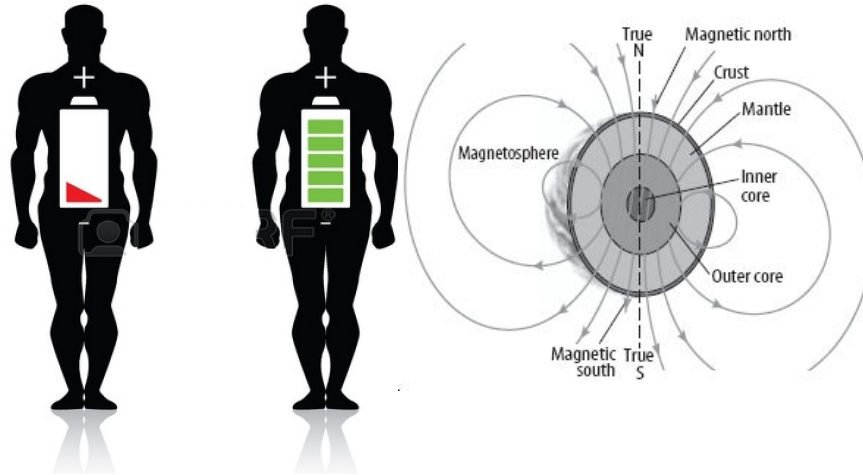
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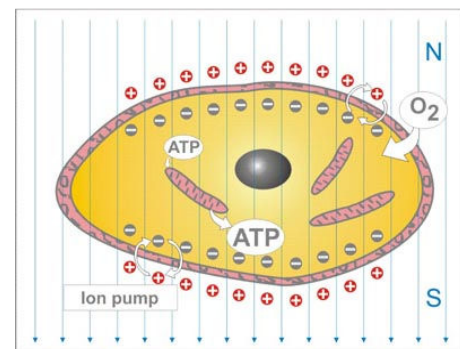
Sing the Body Electric



The body's electrical system is normally recharged by the earth's magnetic field, however this magnetic field is currently in a major decline due to the cyclic reversal of the north and south poles. Astronauts also experience a deterioration of bone and muscle mass in space, due to the distance from the magnetic field of the earth. MatrixPulse technology is based on the original PEMF device designed for NASA.

Cellular Effects of PEMF Therapy:

- Reduces Inflammation and Pain
- Promotes Cellular Environment for Tissue Repair
- Improves Circulation and Oxygen Utilization
- Stimulates Nerve Regeneration
- Improves Bone Repair



MatrixPulse™ Quick Start Guide

Refer to the MatrixPulse™ User Instruction Manual for full details, warnings and precautions

1 Plug in coils

It is best to connect and disconnect the coils with the battery removed. This is to avoid possible damage to the internal electronics.



2 Locate a fully charged battery or use AC adapter

Locate a rechargeable battery that is completely charged, or a fresh non-rechargeable battery. Confirm the battery terminals are correctly aligned to the positive (+) and negative (-) markings on the pulse generator. Be very careful to use correct polarity if using optional 9v adapter (risk of fire/burn).



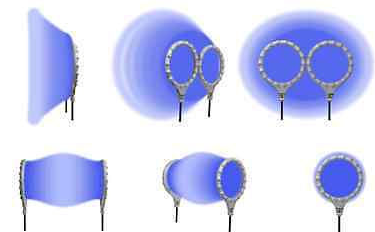
3 Set switch, verify operation

Set switch to L, M, H, X (see "Intensity Settings" on page 8. Verify the green LED is flashing and the coils are "clicking". During treatment the green LED will flash (Stimulation Mode).



4 Choose coil configuration

Choose an opposite-side coil configuration for thinner or smaller injury areas, or select a side-by-side coil configuration for thicker or larger injury areas.



5 Treatment

Locate both coils with their **bumps away from the skin** (smooth side against the body). This is true for both coil configurations. You may also use the coils stacked one on top of the other with the bumps facing each other for small areas. This method produces an even deeper treatment effect. Treatment in any area should last a minimum of **20 minutes**, and even longer can be more effective.



6 Also remember

Keep coils away from metal objects and pacemakers. Experiment with different coil configurations and locations.

Be patient: chronic injuries respond more slowly than acute.

MatrixPulse Coils

The MatrixPulse System has two specially-designed coils powered by the pulse generator. The two coils give you control over how the pulsed magnetic field is shaped so that you can better focus the magnetic field on the injury site. This maximizes the stimulation to the injured tissue while minimizing unnecessary stimulation to surrounding tissues. This ability to control stimulation zones is a unique advantage of the MatrixPulse System.

Each coil is flexible, so this allows you to bend and shape the coils to conform them to the surface of the body or limbs, neck, face, jaw, tail or digits.

The MatrixPulse System's two coils give you great flexibility in using the system for different areas of the body. They allow you to control how the pulsed magnetic field is shaped into different stimulation zones so that you can better focus the magnetic field on the injury site. This maximizes the stimulation to the injured tissue while minimizing unnecessary stimulation to surrounding tissues.

The coil configurations result in the two different stimulation zones illustrated below. The darker regions of the stimulation zones indicate where the magnetic fields are strongest. The stimulation zone of the opposite-side coil configuration is narrower and deeper, whereas the stimulation zone of the side-by-side configuration is wider and shallower.

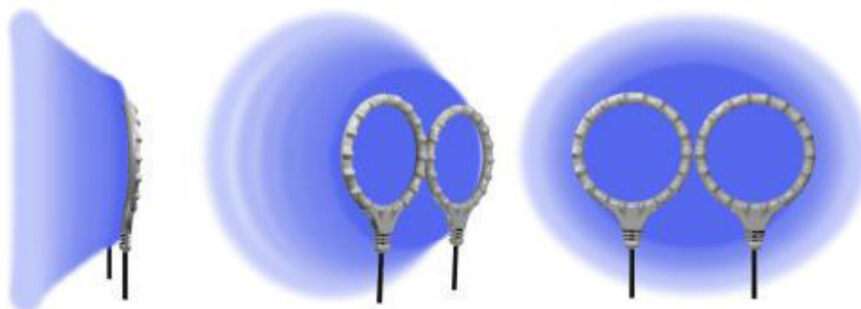
Opposite-Side Configuration:

The Opposite-Side configuration is generally used to treat joints, such as arms, elbows, knees, ankles, etc. In such cases the two coils are located on opposite sides of the stimulation zone, with the bumpy side facing away from the skin. In this configuration, the magnetic field is sufficient to penetrate a larger body part, such as a chest, or across the hips (thickness >100 mm.), etc.

The Side-by-Side configuration can be effective for large parts of the body when the injury is relatively close to the surface, within 2 to 4 inches (50 to 100 mm) of the skin or a side-by-side configuration will lead to higher amount of energy into an area. In these cases the coils are situated on the same side of the injury area, adjacent to each other, with the bumpy side facing away from the skin.



Stimulation Zone of the Opposite-Side Configuration



Stimulation Zone of the Side-by-Side Configuration

Side-by-Side Configuration:

Visualizing the magnetic field can be helpful when considering how to place the coils. When the coils are placed on opposite sides, they will generate a magnetic field that fills the space between the two coils. On the left is shown an injury (red jagged shape) between two coils, one above, one below so that only the top coil is visible. On the right is shown the injury, again a red jagged shape, between two coils. The closer together you place the coils, the stronger the field will be, and the more stimulation you will be able to focus onto the injured tissue. As always, place the bumpy side of each coil away from the skin. This ensures that the magnetic fields are lined up properly and not opposed to one another, which would cancel out the magnetic field at the injury site and render the system ineffective.

Also note that it is OK if the wound is larger than can be completely covered by the coils. The stimulation has a beneficial effect on tissues in the general area of stimulation, so coil size and placement do not need to be precise. The magnetic field from the coils also extends to the sides of the coil by upwards of 12 inches. It is best to visualize the magnetic field as a three-dimensional structure going on all sides of the coil.

It may also be helpful to move and reposition the coils occasionally, especially if the exact site of the injury is not clear. This will change the orientation of the magnetic field, which may also be beneficial.

Uninjured tissues do not seem to react to the magnetic fields, so it is OK to reposition the coils so that they envelop the injury from different directions. For example, on the first day or two you might place the coils on a limb on the outside/lateral and inside/medial surfaces. Then for the following day or two you might choose to reposition the coils on the back/dorsal and front/ventral surfaces around the injury. You might later decide to place them between these positions, ie, obliquely. To the extent possible it is best to try several options to determine what seems to work best. The preferred placement of the coils might ultimately be driven mainly by practical concerns such as ease of securing or bandaging the coils or placement of the magnetic pulse generator.

Coil Placement

Tissue response often occurs more quickly when coil configurations are periodically alternated between configurations. You are encouraged to experiment with configurations and locations to determine what works best for you. The illustrations below show just a few of the areas that can benefit from the MatrixPulse. Only the coils themselves are shown for clarity and are represented in their flat, non-flexed geometry. Try to keep the coils no farther apart than 3 coil diameters (about 6 inches). Optimal separation distance is 4 inches or less.

Coils may also be used separately on different parts of the body. For example, one coil can be used on one shoulder and the other coil can be used on the opposite shoulder. Similarly, one coil can be used over the front of the thigh on one side as well as on the front of the thigh on the other side. This will still produce a magnetic field of around 70 Gauss around each coil.

An additional configuration frequently used is to stack the coils one on top of the other, bumpy side to bumpy side. This appears to increase the field intensity by almost double that found by opposite side placements. The closer the coils are together, the higher the intensity of the field is between them. However, the stacked configuration amplifies the combined field significantly. This may be used to focus a large amount of energy into a smaller area.

Depending on the instruments used to measure the field intensity, the dimensions of the fields produced by stacking can be as much as 3 feet in diameter. Therefore, placing a coil over the front of the chest and the back of the chest will still fill the whole chest with a magnetic field. The same would apply to the abdomen and pelvis.

Coil Placement Examples



Knee: opposite-side



Knee: side-by-side



Self Adhering Bandage Used to Hold Coils in Place



Lower back: side-by-side



Lower back: side-by-side



Side of Head (both sides)



Neck: side-by-side



Neck: opposite side



Back of Head



Shoulder: side-by-side



Shoulder: opposite-side



Front of Head

Testing the MatrixPulse

Coil Testing

The coils are delicate and should be treated with care. They may need to be replaced from time-to-time, depending on how they are handled. In order to ensure proper function, they should be tested on a weekly or biweekly basis, using the Coil Tester provided (see below). If they are operational, placing them over the tester and turning the unit on, will cause the two lights on the tester to flash repeatedly. If not, the coils should be replaced.



Intensity Settings

It is important to set the intensity to the optimal level for best results. The intensity control is a slide switch and is located on the front of the device, next to the ON-OFF switch (see photo, right).



The intensity settings should be checked by sitting with the coils placed on or near part of your body. With the MatrixPulse in the OFF position, place the palm of one of your hands on the center of the thigh muscle. Apply gentle pressure, on the muscle, slowly until you feel resistance, which “stops” your palm from pressing further without being forceful. This is called the “barrier”. Note how far in you can push. Now, rest your hand without pressure and turn the MatrixPulse to the ON position. Wait a few seconds and apply pressure to the muscle once again, noting any increase in the depth of the barrier. Change the intensity setting, wait a few seconds and test again. Choose the setting for your treatment that allows the greatest depth, or softening of the muscle. This should be rechecked on a daily basis, as various factors may cause it to change slightly.

*MatrixPulse™ is distributed by: Wellness Systems Inc.
www.MatrixRepattern.com*

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