EquiPulse X1 MP USER Guide
For Equine and Small animal use only

Pulse Electro-Magnetic Field Therapy
for use as an aid in the management of
musculoskeletal disorders in the horse

SCAN FOR
EquiPulse Information

Basic facts you'll want to know:

PEMF therapy is non-invasive, physical contact with the device is not even required.

PEMF therapy regenerates damaged and diseased tissue, repairs torn tendons and fractured bones.

PEMF therapy enhances the synthesis of protein within cells, allowing the body to take advantage of all the protein available.

PEMF therapy improves circulation, not by increasing heartbeat or blood pressure, but by opening and dilating the arteries and capillaries. This also reduces swelling.

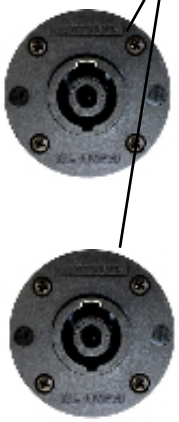
PEMF therapy increases the cellular level of oxygen absorption. Studies have shown that oxygen partial pressure can be increased by 200%. This reduces pain associated with a lack of sufficient oxygen, in cells, which often causes lactic acid buildup under strenuous exercise.

PEMF therapy is particularly effective in treating deep muscle soreness because of its penetration.

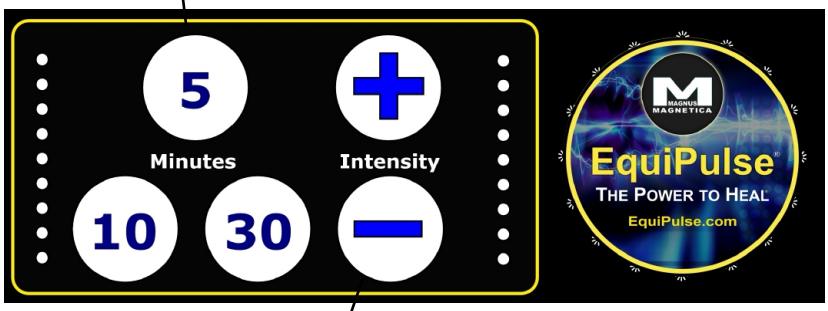
USER CONTROLS AND SYMBOLS

First familiarize yourself with the control interface under the lid

Pair of coil connector sockets allow one application coil to be safely and securely locked into



Preset 5 minute or 10 minute or 30 minute pushbuttons; press one to begin a treatment. Verticle blue lights illuminate when a cycle begins and turn off incrementally as session progresses



Intensity pushbutton + plus and - minus : Press plus to increase or minus to decrease the intensity to one of the five preset intensity levels. One to nine blue lights will illuminate.

MAINS socket to plug in the medical grade power cord.

The MAINS power rocker switch turns the device on "I" and off "O".

Go to www.EquiPulse.com Watch a 9 minute video on use of EquiPulse PEMF technology on horses.

SCAN FOR EquiPulse Information

DIRECTIONS FOR USE

The MAINS power rocker switch turns the unit on “I” and off “O”. Use the MAINS socket to plug in the medical grade MAINS power cord.

Getting Started

Connect the power cord into the MAINS socket on the back of the device.

Always lock a treatment coil connector into the connector socket on the front of the device before turning the MAINS power switch on “I”. The device will not start if the treatment coil is not properly connected.

Application Cycles

An application cycle lasts 5 minutes, 10 minutes or 30 minutes. Press the desired membrane timer button to commence a session. Each applicaton cycle may be set at one of nine intensity levels by pressing the plus or minus buttons. A corresponding number of stacked lights will illuminate.

The pulse rate/intensity button a + or - sign increases the intensity of the electromagnetic pulse as it decreases the pulse rate. The pulse intensity can be adjusted from low (bottom LED light) to high (top LED light).

A preset 5-minute, 10-minute and 30-minute buttons begin application cycles. The circular lights around the EquiPulse Label illuminate when the cycle is active.

The exterior coil connector sockets allow application coils/accessories to safely and securely be locked into place.

Close these protective covers when not in use.

More about Inserting/Changing an Applicator Coil

To connect an applicator coil, align the metal table on the coil connector to an “11:00 o’clock” postion with the metal tab on the coil connector socket of the device. Push the connector into the socket, then turn right until you hear a “click”. The applicator coil is then locked into place. To remove the applicator coil, pull the metal tab back and turn the end of the coil connector to the left (counter-clockwise) to disengage and pull it out. Do not plug or unplug the applicator coil during any active session.

Beginning a Session

Press the MAINS power rocker switch to “I” to turn the device on. Place an applicator coil on or around the targeted area on the animal. The closer the coil is to the targeted area, the more effective the application cycle will be. See Usage Hints on the following page.

Press the 5 minute, 10 minute or 30 minute timer button to begin the session. Blue lights spiral when an session begins. The lights turn off and the device emits a single long beep when the tsession ends. Press the 5 minute, 10 minute or 30 minute again to begin another session.

Pausing/Resetting/Ending the Session

During a session, briefly press the active pushbutton to pause the session. The corresponding blue light flashes continuously while in “paused mode”. To resume the session, briefly press the same pushbutton again.

To end the session cycle prior to completion, press and hold the active pushbutton until you hear a single long beep and the led lights turn off.

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Introduction Process:

- Introduce yourself the the horse - letting the horse smell you, if you are new to the horse.
- Introduce the Loop - turn the Device on a low intensity setting and let the horse smell the Loop.
- Avoid any and all "surprises".
- For a new horse, maintain contact with one hand as you slowly bring the Loop toward the horse's torso.
- The primary goal is to get the horse to relax.

Approach Targeted Areas Slowly:

- At a Fast Pulse rate (low intensity) approach treatment areas slowly/carefully.
- Watch for signs of discomfort or alarm.
- If you are treating an area with an open wound or suture, always consult a Licensed Veterinarian

USAGE HINTS

The torso and rump are very sensitive. Be careful initially with the magnetic pulse delivery loop. This is especially true near the hips and back. This is the area that most horses are stiff and sore or may have arthritic conditions. Use the lowest power initially to determine the sensitivity of the horse. If it the first application, approach the horse very carefully. The pulses are deep and the horse will be completely unfamiliar with this powerful, pulsing sensation. Carefully and slowly glide the delivery loop about 2-3 inches over the hindquarters, loins and croup. This will provide a gauge of how sensitive the horse is to a very low level magnetic pulse. The level sensitivity and response from the horse is usually an indication of the severity of the afflicted area.

Very slowly, move the delivery loop closer to the horses body. You will see greater contraction of the muscle beneath the delivery loop as the delivery loop is moved closer and/or the speed is made slower, intensifying the delivery of magnetic pulse. If the horse becomes startled, quickly pull the delivery loop away from the horse. After the device is running you can turn the speed slower to adjust the pulse speed to the level of comfort of the horse. Over time, the horse will habituate and become more comfortable with stronger pulses.

24" Equine Wings

The joints are not sensitive. Use the doubled joint loop for a more powerful and concentrated pulse. The joint loops are tightly wound, use this delivery loop to deliver deep a penetrating PEMF for maximum results. Be careful that if the horse pulls away the loops must release quickly.

Pulsed Magnetic Therapy for the best results. Use the machine on the same area of the horse's body more than once Take the magnetic pulse delivery loop loop and rotate it 90 degrees in different directions from the last timed 3 minute application cycle, thus applying it on the same body part, but from different directions.

Joint Loop

Strength of each individual pulse. Each pulse should be strong enough to make the cells and muscles spasm strongly, but not cause pain. As you work on each horse, you will find in a few minutes that their sensitivity to the EquiPulse subsides.

Pulse Speed. A slower pulse speed (stronger pulse) penetrates deeper. Therefore, as the horse's sensitivity decreases, the more tightly looped joint delivery cable may be used on other areas of the horse's body.

- **If There Are Signs of Discomfort:**
  - Retreat by immediately pulling the loop off the treatment area.
  - Avoid "chasing" or trapping the horse.
  - Turn the intensity level down and try again.
- **When EquiPulse is Working:**
  - Discomfort eventually subsides.
  - Increase the Intensity Level for deeper penetration/treatment.
  - There is no need to rush.
- **Avoid using the EquiPulse:**
  - with fly spray
  - with toxins or agents
  - with liniment
  - on tranquilized or sedated animals.
- **Because:**
  - PEMF creates more Cell Permeability
  - Toxic Agents can then
  - Penetrate more deeply than intended
  - Can cause an adverse response

But...

- DMSO is OK ...
  - Because it already penetrates the Cells
  - Works well with EquiPulse
- Antibiotics are OK...
  - Aids antibiotic performance
  - Aids cellular mobility

Hoof Pro Binding - Mag Disc inserted


Mag Paddle Pro


18" Equine Wings

MORE ABOUT HIGH-POWERED PEMF DEVICES

• High-Powered PEMF devices deliver the “pulsed electromagnetic (not electrical) energy” through an applicator coil and into the area (e.g. Leg) it is applied on. The recurrence of the “pulse event” depends on the intensity setting of the device: the higher the pulse intensity is set, the longer the interval between pulses lasts. (As a frame of reference on a very low intensity setting there may be as many as 4 or so pulses per second; at a higher intensity there may be only one pulse per second). The high intensity combined with (only seconds) duration produces more activation of molecules. The short “on-time” of the charge means cells have sufficient “off-time” to utilize the energy received and reset to receive it again unless the cell is fully-recharged (at which point the energy passes to other cells in need). High PEMF intensities produce sufficiently-high charges in the horse’s body to increase a cell’s Adenosine Triphosphate (ATP) by up to 500%. This gives cells more fuel to be efficient while stimulating the body’s own capacity for healing.

• High-Powered PEMF affects the physics of the cell first; the physics, in turn, affect the chemistry which affects the tissue. PEMF does not discriminate: PEMF works to restore cell performance regardless of where the cell is situated, what it does, whose it is, or (even) what has happened to it; PEMF works with what there is to work with. The charges produced by High-Powered PEMF positively affect circulation, coagulation, fractures, emotional/cognitive issues, immunology, muscle actions, nerve conductivity, EEG effects, intestinal motility, skin respiration, antioxidant activity, and many other bodily functions.

• High-powered PEMF creates a time-varying magnetic field which induces an electric field (with magnitude proportional to the rate of change of the magnetic wave) in the body. The ability of High-Powered PEMF to produce up to 5.3T per microsecond produces significant changes quickly (often) leading to noticeable results rapidly.

MAINTENANCE

Service

- The device has no user serviceable parts and must be returned to the manufacturer for servicing.
- Application coils, mats and MAINS power cords are available from the manufacturer.
- The device is a sealed unit and lint, dust, light, including sunlight, etc. have no effects on it.
- Dangerous Voltage inside; DO NOT remove the cover or tamper with the device.

REMOVING THE COVER OR TAMPERING WITH THE DEVICE VOIDS THE WARRANTY.

- Contact Magnus Magnetica for assistance in setting up, using or maintaining the device.
- Disposal: This device is an electronic device. Electronics should never be disposed of with regular trash. Take non-working electronics to an electronics recycling center.
- Cleaning:There is no mandatory or scheduled cleaning, maintenance or sterilizing necessary. If you choose to clean the device:
- Disconnect the device from the MAINS before cleaning,
- DO NOT immerse any part or pour any liquids on the device.

CONTRAINDICATIONS

• The use of rubs or solutions, while using pulsed magnetic therapy, must be monitored. When using a LOW setting, do not use any iodine based leg paints. Iodine induces heat and this will interfere with the effectiveness of the LOW setting (which is to reduce heat in the area).

Note: Something to watch for when you begin a session; it is common to see an animal hang its head slightly and look extremely relaxed.

GENERAL CAUTIONS AND WARNINGS

• CAUTION: Should pain, swelling, inflammation or lameness become worse at any time, discontinue use of EquiPulse therapy and consult a veterinarian immediately.

• WARNING: Pulse Electro-Magnetic Fields are in use with this equipment and may interfere with human medical devices such as pacemakers and electronic stimulators.

TROUBLESHOOTING

If the device fails to function, use the following troubleshooting steps:

• If there are beeping sounds:

Proceed to identify the error beep code the device emits.

Single two second beep: End of session. Solution: Press a start pushbutton to begin a new treatment.

• Three short beeps & one long beep: The coil is not connected properly or was disconnected while the device was in use. Solution: Connect the coil properly and press a start pushbutton to begin a treatment.

• Two short beeps three times, followed by one long beep: Device overheating. Solution: Allow the device to cool down for 10 minutes by leaving the power on while no session is activated. The cooling fan will cool the device. Press a start pushbutton to begin a session after the 10 minutes have elapsed.

If the lights do not illuminate and there are no beeping sounds: Make sure the MAINS power cord is properly connected at the control unit and a MAINS outlet. Make sure the MAINS outlet is functioning. Try plugging another electrical appliance into the outlet to determine if it works. If the outlet works, test the device with another MAINS power cord.

If the device still fails to start or function properly, contact the manufacturer, listed on the enclosed Warranty Card to get a Return Merchandise Authorization (RMA) number. Disconnect the coil and the power cord. Package the device securely and return it to the manufacturer for servicing with the RMA number and your contact information.

STORAGE AND TRANSPORTATION

• Keep the device dry and store in a dry place. Storage in a damp place may cause corrosion.

• Store and transport at temperatures between 10° to 50°C at a relative humidity of up to 93% non condensing.

• Remove the MAINS power cord and the detachable treatment coils from the control unit and pack all parts of the device securely before transporting.

Warranty

The Warranty Registration Card must be filled out and returned to the manufacturer within 30 days of the date of purchase to activate the warranty.

The manufacturer warrants this device to operate properly for a period of three years from the date of the original purchase invoice. In the event of a malfunction during the warranty period, the manufacturer will, at its discretion, replace or repair the device to its original operating condition. Freight and insurance to and from the manufacturer's repair facility are not included. Freight and Insurance are the responsibility of the registered owner.

A Return Material Authorization (RMA) number must be obtained from the manufacturer, through the distributor prior to returning any device or accessory for service. The device must be delivered with prepaid freight, the RMA provided, the registered owner's name and address, and a brief description of the difficulties encountered. The device is to be shipped to the address designated by the manufacturer.

Such service, repair or adjustment of the device is guaranteed to the original purchaser provided the device has not been tampered with, does not have any physically broken parts and the control unit was not opened, altered or damaged as a result of misuse, accident, water, grit, impact, or lack of proper care.

DEVICE SPECIFICATIONS

- Voltage input: 120 to 230 VAC, 50 to 60Hz 1 Amp maximum
- Current input: 1 Amp Maximum
- Dimensions: 13.56" x 5.76" x 11.70”
- Weight: 7 lbs
- Shipping weight: 8 lbs

There has been much speculation and guessing about gauss levels by different manufacturers and distributors of PEMF technology. The most significant challenge with emerging multi-powered devices capable of a high voltage discharge is the simple fact that the discharge is so fast that a standard PEMF gauss meter cannot accurately measure the peak level of gauss. To be more precise, it has not been possible to measure gauss on our multi-powered PEMF technology with any traditional gauss meters because of the 5 microsecond discharge. Thus, without a proper gauss meter, the claims of gauss ratings are published by manufacturers and distributors based up calculations derived from a device's specifications of voltage, resistance and impedance. The fact that claimed, gauss ratings will vary widely and are not entirely accurate is no longer a surprise.

Gauss terminology: The gauss, abbreviated as G or Gs, is the cgs unit of measurement of magnetic flux density (or magnetic induction). It is named after German mathematician and physicist Carl Friedrich Gauss. One gauss is defined as one maxwell per square centimeter. The cgs system has been superseded by the International System of Units (SI), which uses the Tesla (unit T) as the unit of magnetic flux density.[1] One gauss equals 1×10−4 tesla (100 μT), so 1 Tesla = 10,000 gauss. You may refer to this simple formula when reviewing our manufacturer's gauss ratings below.

Factory Specs on Gauss and Frequency Output Levels

EquiPulse X1 MP 1-9 Settings Output	Gauss at Center of 14" Loop	Gauss directly on 14"Loop	Gauss at Center of 4.25" Mag Disc	Pulses Per Second	MP-MF PEMF	Perimeter of Large Loop	Mag Disc
Intensity Level 1	50	90	1070	10.00	N/A	540,000	**6,420,000**
Intensity Level 2	90	190	1840	3.80	7.83 HZ	433,200	**4,195,200**
Intensity Level 3	160	220	2250	2.22		293,040	**2,997,000**
Intensity Level 4	200	330	2950	1.61		318,780	**2,849,700**
Intensity Level 5	210	500	3480	1.10		330,000	**2,296,800**
Intensity Level 6	220	660	4010	0.86		340,560	**2,069,160**
Intensity Level 7	270	720	4880	0.65		280,800	**1,903,200**
Intensity Level 8	300	920	5420	0.52		287,040	**1,691,040**
Intensity Level 9	320	1040	5670	0.40		249,600	**1,360,800**

Magnus Magnetica, LLC
1555 East New Circle Road Suite 142-214
Lexington, KY 40509
323.680.5411 www.EquiPulse.com

MANUFACTURER’S INFORMATION:
PEMF Systems, Inc.
+1 (702) 448-2660
support@pemfsystems.com www.pemfsystems.com

Magnus Magnetica, LLC

DECLARATION OF CONFORMITY

Manufacturer's Name and Address:

Magnus Magnetica, LLC
1555 East New Circle
Road, Lexington, KY,
USA 40509

Name of Product: 750-P1430 Name of Product: EquiPulse X1MP

This declaration of conformity is issued under the sole responsibility of the manufacturer. The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

LOW VOLTAGE DIRECTIVE 2014/35/EU - *Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits.*

EMC DIRECTIVE 2014/30/EU - *Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility.*

Standards Applied:

IEC 61000-4-2:2008 − Electromagnetic compatibility−Part 4: Testing and measurement techniques ! Section 2: Electrostatic discharge immunity test
IEC 61000-4-3:2010 − Electromagnetic compatibility−Part 4: Testing and measurement techniques ! Section 3: Radiated, radiofrequency, electromagnetic field immunity test
IEC 61000-4-39:2017− Electromagnetic compatibility (Emc) −− Part 4−39: Testing And measurement Techniques − Radiated Fields In close Proximity − Immunity Test
IEC 61000-4-4:2012 − Electromagnetic compatibility−Part 4: Testing and measurement techniques ! Section 4: Electrical fast transient/burst immunity test
IEC 61000-4-5:2014+A1:2017 − Electromagnetic compatibility−Part 4: Testing and measurement techniques ! Section 5: Surge immunity test
IEC 61000-4-6:2013 − Electromagnetic compatibility−Part 4: Testing and measurement techniques ! Section 6: conducted immunity test
IEC 61000-4-8:2009 − Electromagnetic compatibility−Part 4: Testing and measurement techniques ! Section 8: Power frequency magnetic field immunity test
IEC 61000-4-11:2004+A1:2017 − Electromagnetic compatibility−Part 4: Testing and measurement techniques ! Section 11: Voltage dips and interruptions immunity test
IEC 61000-3-2:2018 − Electromagnetic compatibility (Emc) − Part 3−2: Limits − Limits for harmonic current emissions (equipment input current < 16A per phase)
IEC 61000-3-3:2013+A2:2021 − Electromagnetic compatibility (Emc) − Part 3−3: Limits ! Limitation of voltage changes, voltage fluctuations and flicker in public low−voltage supply systems, for equipment with rated current < 16A per phase and not subject to conditional connection

This declaration of conformity is valid from 01 January 2022.

Authorized Signatory:

Name: Henry Siegel - Owner

Authorized in behalf of : Magnus Magnetica, LLC

Date: July 1, 2023. Signature: