



THE THERAPY TREATMENT REFERENCE BOOKLET

This booklet has been created to act as a tool for reference to assist Stewards during their Barn Check Walk-throughs. As there are so many Equine Treatment machines and equipment found within the FEI barns it is hard to know what is allowed and not allowed. Information links are also found on each page for further information from product websites.

This booklet is only for reference. Always confirm questionable equipment with the FEI Veterinarian or refer to the FEI Vet Guidelines.

THE THERAPY TREATMENTS

- Laser
- Magnetic
- Ice
- Heat
- Vibration
- Ultrasound
- Alternative



Created by
Stewards Hub

DATE: 16/09/01

ECB EQUINE SPA



Reference: <http://www.equinespa.com/cold-saltwater-spa/>

- Hydrotherapy is used to treat (and prevent) a multitude of injuries between 2°C & 4C/ 35° and 37F saltwater. The spa has successfully addressed virtually all lower leg injuries. Treatment temperature alone induces a massive rush of blood and circulation which otherwise would not be present. This drug free therapy can be used for injury prevention and also to increase mobility and reduce swelling in the limbs before and after competitive events and training.

GAME READY



References:

<http://intl.gamereadyequine.com/science/Compression.htm>

<http://intl.gamereadyequine.com/science/ColdTherapy.htm>

Active Compression

Active compression therapy has been recognized as a superior method of eliminating swelling. The active and adjustable compression settings provided by the Game Ready® Equine System mirror the way your horse's muscles naturally contract and relax to push fluids and cellular debris (edema) into and along the lymphatic drainage system, as well as help drive cold therapy deeper for longer lasting effects. This means the benefits of Game Ready Equine's cold therapy go far beyond the surface to the internal tissue that is harder to reach. Learn more about dry cold therapy.

Dry Cold Therapy

Cold therapy is universally used to minimize damage following injury and help equine athletes heal faster during injury rehabilitation.

Cold has a local anesthetic effect that can significantly reduce pain and inhibit reflexive muscle spasms in your horse. Early use of cold therapy can reduce primary bleeding through its vasoconstrictive effects, and thus inhibit swelling. And perhaps most importantly, reducing tissue temperature can lower the metabolic rate of both the involved and uninjured cells, decreasing their demand for oxygen — helping to break the secondary hypoxic injury cycle and making the body's repair job easier.

ICE-VIBE BOOTS



The ICE-VIBE boots are rechargeable vibrating boots that help to boost circulation in horse's legs by creating a massage effect. They combine the effects of cooling and massage therapy to effectively treat strains, ligament and tendon damage. The massage effect helps to stimulate the lymph system to remove soreness and swelling as well as improving circulation. .

Reference: <https://www.horseware.com/ice-vibe/>

CENTURIAN BOREAS CS

C O L D C O M P R E S S I O N T H E R A P Y



- The new Centurian Boreas is the latest in cold compression therapy. It uses a combination of ice in a therapeutic setting and compression. The ice lowers the temperature of the injured tissue decreasing its metabolic rate and preserving the tissue while compression is used to increase the external pressure on the tissue relieving internal swelling. Common applications for cold compression are post workout therapy, injury prevention, sprains, strains, cellulitis, tendonitis and bowed tendons to name a few.

Reference: <http://www.centurionsystems.com/boreas-cs/>

ICE HORSE CONTINUOUS COOLING SYSTEM



Treats legs. Includes a hock, pastern, and fetlock treatment pad. Includes splitter, thermometer, insulated hose, two rectangle pads and two insulating compression bandages. Passive constant compression to assist tendon and other soft tissue repair.

Reference: <http://www.icehorse.net/products/ice-horse-continuous-cooling-systems>

BACK-ON TRACK MESH BLANKET



The Back onTrack® Ceramic Mesh Sheet relieves sore muscles and warms cold backs to help increase mobility and performance in horses. This ceramic mesh sheet reflects soothing far infrared thermal warmth to help a horse's muscles recover from exercise and increase blood circulation .

Reference: <http://www.backontrackproducts.com/Horse-Products/Horse-Blankets-Neck-Head-Covers/Therapeutic-Mesh-Sheet-p322.html>

BACK-ON TRACK HOCK BOOTS



Back On Track® Ceramic Hock Boots feature state-of-the-art fabric that's embedded with ceramic powder to reflect the horse's body warmth.

Used as an aid to pain management or to help increase mobility. This is a well-recognized method used to help relieve and heal injured muscles, joints, and tendons.

Reference: <http://www.backontrackproducts.com/Horse-Products/Horse-Knee-Hock-Bell-Boots/Therapeutic-Hock-Boots-w-HOLES-p281.html>

REVITAVET



- RevitaVet™ is to educate competitors and horse owners of all disciplines on the benefits of infrared therapy. RevitaVet™ provides healthy maintenance and rehabilitation of your equine athletes, enhancing their peak performance condition, while preventing costly veterinary ailments before they arise.
- In the early stages of light emitting diode (LED) technology, infrared light was often used to treat performance racehorses for a variety of injuries ranging from abrasions to strained muscles and tendons.
- Reduces Inflammation & Relieves Pain
- Stimulates Acupuncture Points
- Raises Performance Levels Without Medications
- Works On The Cellular Level
- Fights Infection On Open Wounds
- Non-Invasive & No Known Side Effects
- Works Well With Other Modalities

CENTURIAN TRANSPIRATOR



Reference: <http://www.centurionsystems.com/transpirator/>

The Centurian Transpirator is easily a horseman's greatest asset when working with respiratory conditions. A key feature is that it's drug-free. The Transpirator II delivers pure water vapor (water in its gas state) into the entire respiratory tract at a precisely controlled temperature. This 100% humidity penetrates into the entire lung, reaching the deepest and smallest airways.

It improves performance by preventing airway heat and water loss, and by depositing a thin film of condensation on the walls of the respiratory tract. The retained water thins the mucous blanket, dissolves mucous plugs, and helps expel the excess mucous.

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AEROHIPPIUS INHALER



The **AeroHippus*** Equine Aerosol Chamber (EAC) is designed to be used with a pressurized-metereddose inhaler (puffer) as recommended by a veterinarian to deliver aerosol medication to horses with respiratory diseases such as Inflammatory Airway Disease or Recurrent Airway Obstruction.

When the **AeroHippus*** EAC is attached to the puffer it allows your horse to breathe normally and inhale the aerosol medication so the medication goes deep into your horse's lungs where it is needed.

Reference: <http://www.trudellmed.com/animal-health/aerohippus>

CENTURIAN LASER SHOWER



- The Centurion Laser Shower operates by emitting a continuous shower of laser light at multiple frequencies from the treatment heads, so that a wide range of problems from surface injuries to deep seated soft tissue injuries may be treated without resorting to specific frequency selection for a particular problem – as was previously required by older style units.

CYTOWAVE THERAPY



Cytowave is a patented, non-invasive treatment based on tissue specific signals. While other devices in the equine market use generic electromagnetic waveforms, Cytowave offers a tissue specific analytic method based on the biology of the injury. The tissue signal is derived based upon the difference in biomagnetic signals from normal and injured tissues.

This proprietary SQUID Therapy Signal (STS) is amplified and delivered via a mild magnetic field.

Reference:
<http://www.cytowave.com/>

PEGASUS LASER THERAPY



The PTC laser incorporates innovative Smart Coat™ Plus technology. This pioneering software automatically calculates a recommended dosage by taking into account your patient's condition, body type, coat length, coat color, and skin color. This comprehensive patient-characteristic consideration results in customized treatment protocols designed specifically to meet the needs of each patient.

Laser Type: Class IV, Solid State

Laser Wavelength: 980/810 nm **Laser Power:** 0.5W to 12W **Operating Modes:** Continuous Wave (CW) or Pulsed, 2Hz, 10Hz, 20Hz, 100Hz, 200Hz, 500Hz, 1000Hz, 2500Hz, 5000Hz, and 10000Hz

Reference: <http://www.litecure.com/pegasustherapy/ourproduct/pegasus-therapy-compact-therapy-laser/>

LUMINEX VET LASER



Reference: <http://www.respondsystems.com/luminex-vet.asp>

Applications: Muscle, tendon, and ligament injury
Wound healing
Laminitis
Sore backs
Hock injury
Sore stifles
Calming
Navicular
Arthritis

Laser type:

GaAlAs Continuous - 808nm 1 Watt
GaAs Superpulsed - 904nm 60Watt
Peak

Class: BRH Class IIIb laser (Class IV lasers also available)

Power Supply: Lithium-Ion, rechargeable battery system

Profile Probe: 1W Single diode

Advantage Probe: 8 diodes located in probe

Profile Probe Cap: 3mm aperture

LUMINEX ULTRA-CLASS IV LASER



Dual laser probes for versatile treatments
Fiber optic probe tip for laser acupuncture
Modular architecture for flexibility & growth
No heating or burning like many Class IVs
Adjustable pulsing frequencies

Reference: <http://www.respondsystems.com/luminex-ultra.asp>

ADVANTAGE PROBE



Perfect for "big jobs,"
like arthritic hips and
sore backs
50 sq. cm. aperture
delivers up to 5 Watts
of 808nm laser power
with NO HEATING
or burning

SHOCK WAVE



Shockwave Therapy, properly called Extra-Corporeal Shockwave Therapy (ESWT) is a therapy that has been recently adapted from human medicine for use in the horse.

The machine generates pressure waves that are directed towards the damaged structure using the hand-held device. These pressure waves have been shown to help with improving blood supply, improving the horse's natural repair mechanisms. They have also been shown to have an effect on the nerves supplying pain sensation, and make them less sensitive to pain. This gives a pain-killing effect in addition to stimulating healing.

Reference:

http://www.shockwavetherapy.ca/about_eswt.htm#What is ESWT0

<http://veterinarynews.dvm360.com/shock-wave-therapy-lameness>

THUMPER EQUINE MASSAGER



- Large massage section is ideal for horses, which have large muscle groups. Massage improves circulation and nutrition of joints, and hastens the elimination of harmful deposits. It helps lessen inflammation and swelling in joints and so alleviates pain.

- Thumper tapotement action sends energy deep into fascia layer, increasing blood supply and nutrition to the muscles which helps prevent the buildup of harmful “fatigue” products resulting from strenuous exercise or injury.

- Equine massage can compensate, in part, for lack of exercise and muscular contraction in horses that because of injury, illness, or age are forced to remain inactive.

Reference: <http://www.thumpermassager.ca/massagers/equine-pro.html>

RAPID RELEASE TECHNOLOGY

The RRT is a high frequency vibration therapy device that reduces lameness, reduce pain, increase ROM, and function by releasing scar tissue, adhesions and easing chronic and acute muscle spasm. The RRT's unique frequency and arc motion allow use as a daily treatment, for pre-performance warm up or post performance recovery.

- First Major Advancement in Vibrational Technology
- Uses Optimal Frequencies for Relief of Soft Tissue Problems
- Uniquely Effective for Treating Scar Tissue and Adhesions
- One modality for Multiple Applications and Uses

Mechanism of Action: RRT PRO uses special frequencies at 170 Hz determined optimal for resonating with scar tissue. Scar tissue absorbs this energy at this resonant frequencies efficiently facilitating its dissolution. Scar Tissue is quickly and painlessly released and absorbed into the body. Frequencies between 100-200Hz have been determined to elicit the TVR (tonic vibration reflex), direct RRT high frequency treatments elicit the TVR uncoupling the complex agonist-antagonist coupling and guarding mechanism.



Reference:

<https://rapidreleasetech.com/>

<http://www.holisticequitation.com.au/rapid-release-technology-for-horses/>

EQUIVIBE VIBRATION PLATE



The EquiVibe puts out vertical vibration. (This is very important, not all plates have true vertical vibration.)

It is the preferred vibration in the health industry by doctors and trainers alike. When you walk or run you do not run side to side, your movement is more up and down. So vertical vibration is more of a natural movement, which the EquiVibe provides.

CENTURIAN TAPOTY



- The Tapoty works through percussive massage rather than orbital action. The massage spheres are designed to pivot up and down, penetrating deep into all muscle layers twenty-six times per second.

Reference: <http://www.centurionsystems.com/tapoty/>

EQUILIBRIUM MASSAGE PAD



A lightweight and portable massage pad which works by stimulating the muscles on the horses' back.

Clinically proven to improve back flexibility and promote relaxation Shaped to follow the contours of the horse's back, provides coverage from withers to quarters

Battery operated 30-minute sessions.

Three different, easily adjustable programs that allow you to choose the intensity of the massage.

Reference: <http://www.equilibriumproducts.com/product/equilibrium-therapy-massage-pad/>

CENTURIAN NECK PIECE



The Centurian Neck Piece is a portable battery operated unit made with a heavy cotton twill for durability. It is especially designed to treat the neck of the horse with two coils, one on each side of the neck.

Specifications:

- Power: Input – 115V/60Hz. or 230V/50Hz.
- Power: Output – 18V/60Hz. or 18V/50Hz.

Reference: <http://www.centurionsystems.com/neck-piece/>

CENTURIAN THERAPULSE



The Centurion Therapulse Blanket's unique ability is to treat the entire body of the horse in one session. The blanket contains 10 coils placed strategically along its length in order to treat the horse as efficiently as possible. These coils are removable allowing for easy laundering.

The Therapulse is on a 30 minute timer, freeing the operator from constant monitoring.

Frequency: 2, 15, 30 Hz.

P3 PULSE PEAK PERFORMANCE

P3 ... Pulsed... Peak... Performance
The P3 is a pulsed electromagnetic device (PEMF)

The P3 has proven to be very beneficial in alleviating pain, increasing range of motion and can speed the healing of many types of injuries.

Veterinarians are finding **the P3** to be a very effective non invasive therapy and that the deep stimulation opens the lymphatic system and allows the body to transport waste products out of the tissues thus relieving soreness; it helps to increase blood circulation in the areas being treated, helps to prevent injuries, tendon and ligament problems, joint stiffness, and stimulates hoof growth. It is also very effective in wound healing and the reduction of scarring.



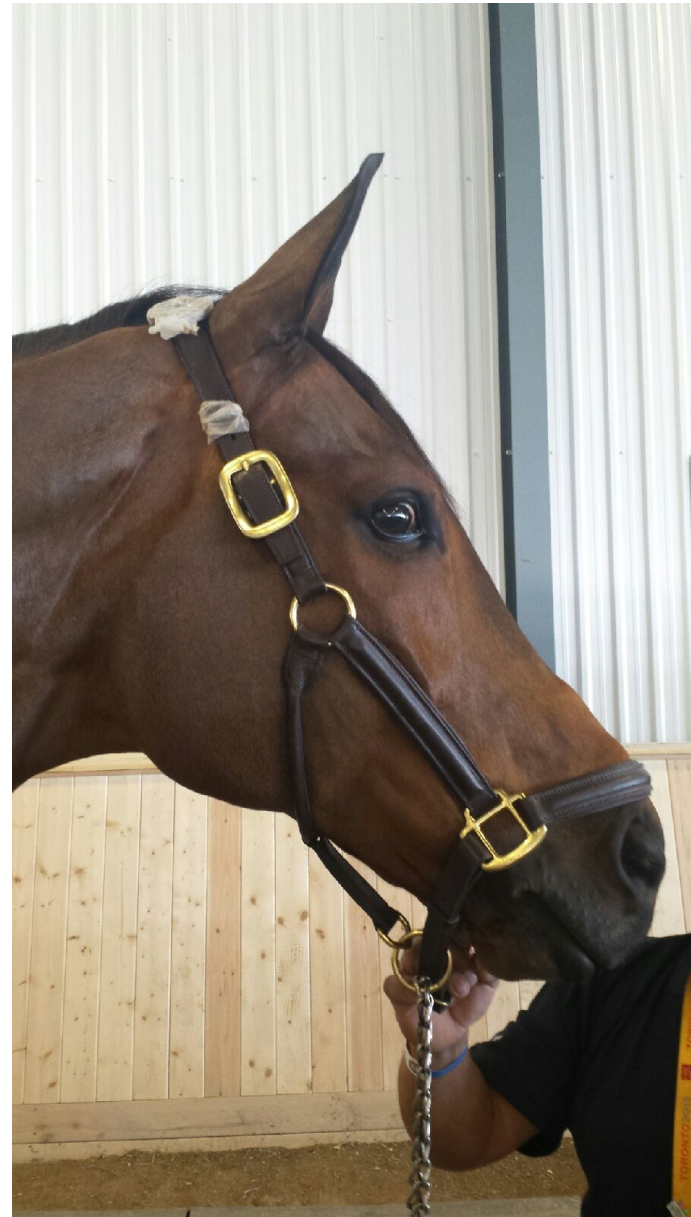
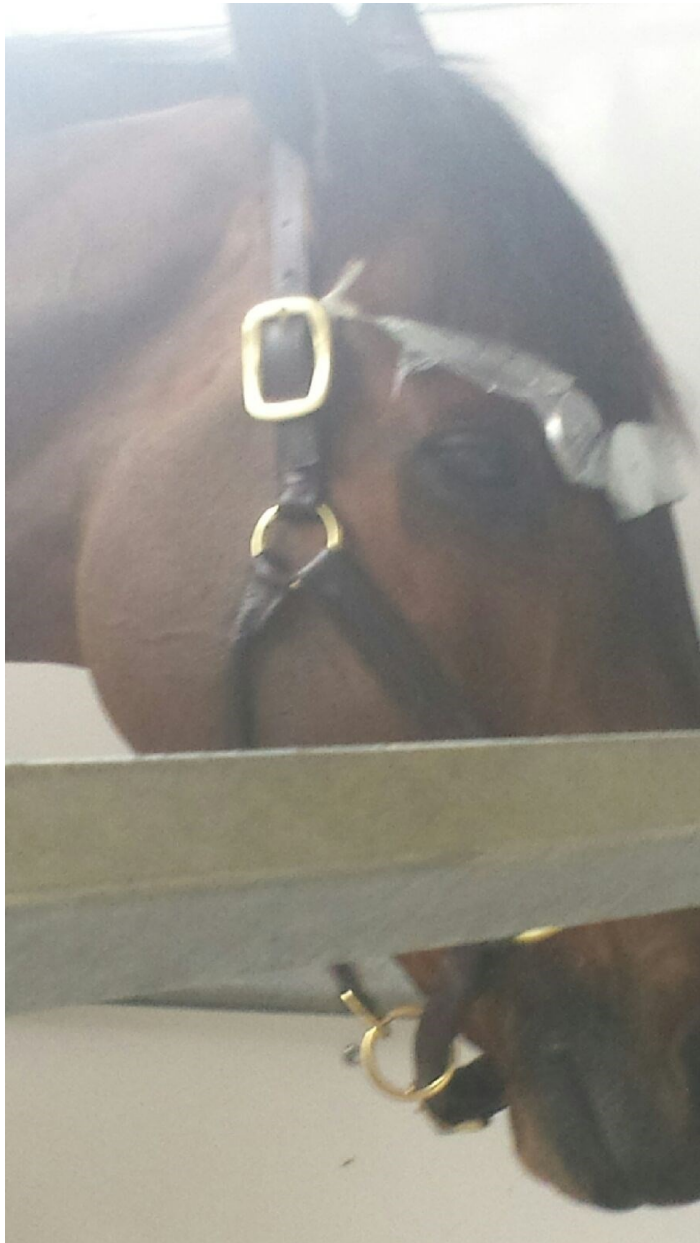
Reference:

http://www.sanctuaryequinerehab.com/P3_treatment.html

<http://www.equinep3.com/about/>



ASSORTED USE OF MAGNETS ON HEAD



BICOM OPTIMA



BICOM THERAPY FOR HORSES

It is a non-invasive, painless therapy for hundreds of chronic diseases in animals. Information is gathered from an animal's electromagnetic frequencies through a computer called the "BICOM". This therapy has been researched in Germany for over 30 years and is used in over 65 countries around the world on both humans and animals.

Bicom stands for **BI**ologic **COM**munication. The Bicom machine is a computer that identifies internal static (electromagnetic oscillations) via electrodes on the body, inverts the frequencies and returns the oscillations to the patient as a therapeutic signal. Bicom can also amplify healthy electromagnetic information from organs/tissues and strengthen normal physiological functions.

<http://www.waveworks.com.hk/howitworks.html>



MAGNA BOOTS



Magnus Magnetica is the first High-Powered PEMF Accessory that delivers treatments from below the hoof and into and through the frog.

The Magnus Boot Pro delivers faster relief from navicular, laminitis, abscesses, etc.

- PEMF (Pulsed Electro-Magnetic Field) Therapy is widely used on humans and to condition race horses at race tracks around the world.
- PEMF therapy regenerates damaged and diseased tissue, repairs torn tendons and fractured bones.
- PEMF therapy enhances the synthesis of protein in the 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 edema (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 lack of sufficient oxygen. Also, insufficient oxygen in the cells causes lactic acid buildup under strenuous exercise.
- PEMF therapy is particularly effective in getting to deep muscle soreness because of its deep penetration.

MAGNA WAVE 1



1. Pulsed Electro Magnetic Therapy (PEMF)

Multi Wave 7S provides a pulsed electromagnetic field. Some scientific studies have shown that Pulsed Electromagnetic Field Therapy (PEMF) may be of benefit in the reduction of osteoarthritic pain.

2. Vibratory Massage

Three levels of vibratory massage therapy are available. Vibratory massage promotes muscle relaxation and increased blood flow, and relieves minor aches and pains.

3. LED Red Lights

LED red light is considered a Photo-bio-stimulation modality used to increase local blood circulation. It can provide a soothing, relaxing and pain relief effect. It is used to treat injuries in soft tissue areas as well as systematic trigger points.

4. LED Infrared (deep thermal effect)

LED infrared light therapy is a low-level light from below the red spectrum. It couples the positive effects of red light with the added benefits of topical heating to increase local blood circulation and provide relaxation of muscle tissue.

5. & 6. Micro/E-Stim Current

The unit produces either a variable low/high E-stim or micro current simultaneously with all of the other modalities. This unit produces alternating and direct current in a biphasic/bipolar mode. The stimulating effect of the micro/E-stim current enhances the overall effectiveness of the other therapies in the Multi Wave 7S. It can provide symptomatic relief of post-surgical or post-traumatic acute pain.

7. Deep Thermal Heat Effect - The combination of the LED light therapies provides a soothing warmth to increase local blood circulation and provide relaxation of muscle tissue.

MAGNA WAVE MAX



The Magna Wave MAXX All-Terrain Unit is ONE OF our most powerful machines, it is equipped with wheels for easy maneuvering and a hard protective case. This model is commonly used by Veterinarians and Massage Therapists.

CENTURIAN HOOF PAD



The Hoof Pad is an accessory designed to operate with either of the powered machines — 4PH or 9PH. The magnetic field penetrates from 12 to 15 inches, not only treating the hooves, but also treating to just below the knee or hock. The Hoof Pad is for treating the hoof, one of the hardest areas of a horse to treat. Other indications the Hoof Pad may work on include: abscess, concussion problems, bruised feet, swelling as well as many others.

Reference:<http://www.centurionsystems.com/hoof-pad/>

EQUINE BIO-PULSE SYSTEM IRON FOOT PEMF PAD



Reference: <http://www.respondsystems.com/store/item.asp?Category=&SubCategoryID=&GroupID=&SKU=IronFoot>

- Self Contained PEMF Pad
31"X20"
- No hook ups needed-
battery powered
- Choice of 3 pulsing
frequencies
- Strong field treats foot,
ankles and legs to knee-
up to 36"
- Automatic 30 minute
treatment
- Remote On/Off/Pulse
switch
- Can be used for 110V or
220V

BIO-PULSE HOCK BOOTS



Hock boots have two coils for complete penetration of the hock joint. Use for poor circulation, trauma, arthritic conditions, spurs, spavins. Connects into the blanket's stifle pocket; this means you can operate the blanket and hock boots all at the same time. Within 30 minutes the therapy is complete.

Reference: <http://www.respondsystems.com/store/item.asp?SKU=HBOOTS>

BIO-PULSE LEGGINGS WITH HOOF COILS



Leggings with hoof coils are available as an option. There are two coils on the leg, and two that sit on the top of the foot, all in the same leg boot. Use for poor circulation, trauma, navicular, leg injuries, abscesses, foot and knee injuries (turn the legging upside down so the foot coil goes over the knee!). Connects into the blanket's shoulder pocket; this means you can operate the blanket and leggings (and all options) at the same time. Within 30 minutes, therapy is complete.

Reference: <http://www.respondsystems.com/store/item.asp?SKU=HBOOTS>

BIO-PULSE MAXI-PULSE HOCK BOOT



Pulsing Magnetic
Field Therapy by Bio-
Pulse in a Stand-
Alone Hock Boot.
Treats tendons,
ligaments, and bone
problems. One
operation switch
starts the 30 minute
treatment.

Reference: [http://www.respondsystems.com/store/item.asp?
Category=127&SubCategoryID=&GroupID=&SKU=SABOOT](http://www.respondsystems.com/store/item.asp?Category=127&SubCategoryID=&GroupID=&SKU=SABOOT)

BIO-PULSE MYERS NECK WRAP



The Meyers neck wrap has four coils that deliver pulsing magnetic field therapy to the cervical spine and the associated muscles of the neck. There are many acupuncture trigger points in this area. Excellent for poor extension and tight muscles. Connects into the withers pocket; this means you can operate the blanket and neck wrap (and all options) at the same time. Within 30 minutes the therapy is complete.

Reference: <http://www.respondsystems.com/store/item.asp?Category=127&SubCategoryID=&GroupID=&SKU=NWRAP>

BIO-PULSE MAXI-PULSE LEGGING



Pulsing Magnetic Field Therapy by Bio-Pulse Treats tendons, ligaments, and bone problems with this proven therapy.

The Maxi-Pulse Legging is support for hoof, bone, soft tissue or knee injury.

Can be used for horses who suffer from laminitis, arthritis, navicular syndrome or a fracture. t

There are two 7 inch coils which cover the cannon bone and associated tendons/ligaments and two 4 inch coils covering the hoof. The legging can be turned upside down to effectively treat the knee.

Reference: <http://www.respondsystems.com/store/item.asp?Category=127&SubCategoryID=&GroupID=&SKU=SALEG>

BIO-PULSE MYERS NECK WRAP



The Meyers neck wrap has four coils that deliver pulsing magnetic field therapy to the cervical spine and the associated muscles of the neck. There are many acupuncture trigger points in this area. Excellent for poor extension and tight muscles. Connects into the withers pocket; this means you can operate the blanket and neck wrap (and all options) at the same time. Within 30 minutes the therapy is complete.

Reference: [http://www.respondsystems.com/store/item?
Category=127&SubCategoryID=&GroupID=&SKU=NWRAP](http://www.respondsystems.com/store/item?Category=127&SubCategoryID=&GroupID=&SKU=NWRAP)

BIO-PULSE “PONY PULSE”



A revolutionary coil system that delivers therapy to major joints and muscles.

Pony-Pulse comes complete with:

- Mesh sheet (small and large)
- 6 Pulsing Magnetic Coils
- Pulsing Generator
- Battery Charger
- Test Magnet

Reference: <http://www.respondsystems.com/store/item.asp?Category=127&SubCategoryID=&GroupID=&SKU=PonyPulse>

BIO-PULSE STANDARD BLANKET



Bio-Pulse blanket shown here on legendary show jumper, Gem Twist. Mesh sheet has 10 coils for complete coverage
Simple one button control with 6 frequencies
The Bio-Pulse Standard Blanket includes:
Mesh sheet so your horse stays cool
Integrated design so cables remain hidden
Industrial battery pack-up to 20 treatments
Charger for overnight battery recharge
Rare earth magnet for quick coil testing.

Reference: <http://www.respondsystems.com/store/item?Category=127&SubCategoryID=&GroupID=&SKU=BPB3000>

BIO-PULSE SENTRY BLANKET



The Sentry PEMF blanket has been designed to cover all the major muscle groups. With eight large coils, two coils for top line support, coils for the hamstring muscles and inside stifle coils, this blanket is a must have for the very athletic, the injured or the aging horse. Our engineers have decreased the weight and increased the power and convenience for you. The Sentry has LED lights on each coil for visual verification of pulsing, built in PCU timer and 7 pulsing frequencies to choose from.

Reference: <http://www.respondsystems.com/store/item.asp?Category=127&SubCategoryID=&GroupID=&SKU=BPBD4000>

ULTROZ ELITE ULTRASOUND

UltrOZ™ Elite provides clinically effective Low Intensity Therapeutic Ultrasound (LITUS).



Ultrasound therapy has been used by Veterinarians for decades to treat common soft tissue and bone fracture injuries. Issues treated using ultrasound include:
Tendon & Suspensory Injuries

Splints
Muscle Strain & Tear
Fracture and Bone Chip Repair
Minor strains, bumps, bruises,
& inflammation.

Reference:<http://www.ultroz.com/>