



**Centurion**

**THERAPULSE IV  
MINI PULSE  
NP**

**Magnetic Field Therapy**  
*for use as an aid in the management of musculoskeletal  
disorders in the horse*

**OWNER'S MANUAL**

May 2014





# Centurion

## Centurion Therapulse IV Centurion Mini Pulse Centurion NP

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**Centurion  
THERAPULSE IV**

**Centurion  
MINI PULSE**



**Centurion  
NECK PIECE**

# INTRODUCTION

Congratulations on purchasing your **Centurion Therapulse IV**, **Mini Pulse** or **NP** from the leader in the field of magnetotherapy equipment! Around the world, equine clinics, veterinarians and colleges are using Pulsed Magnetic Field Therapy as an aid in the management of musculoskeletal disorders in the horse.

This manual will help you understand the benefits, proper use, and maintenance of your equipment. It is written in a simple, easy-to-read manner. The better you understand your **Centurion System**, the easier it will be to achieve the results you want.

The settings recommended in this owner's manual have been derived from these sources:

- working with thousands of trainers over the past two decades and seeing first hand the benefits from the therapy.
- by analyzing the results of numerous veterinarians and equine clinics with testing on numerous combination settings.

**NOTE:** The settings suggested are intended to be a guide to help you achieve the best possible results. Consult your veterinarian for assistance in determining the proper settings for your horse.

## **Explaining Magnetic Field Therapy**

Although fantastic results are sometimes achieved, Centurion Pulsating Magnetic Fields (PMF) is not a miracle. It is a well documented modality being used in the medical field for delivering effective physical therapy.

PMF is a very efficient therapy method that uses paramagnetic impulse bundles. These unique magnetic fields cannot be absorbed, and influence the recipient body either generally or locally at the cellular level.

Human and animal organisms consist of a large number of cells which function electrically. If there is no electrical potential left in the cell, it is no longer viable. PMF can influence the basic (or rest) potential necessary for normal cellular metabolism.

From field experience, we have found PMF can aid in the reduction of swelling, stimulate tissue and contribute to the rehabilitation process.

## The Equipment

	<b>Therapulse</b>	<b>Mini Pulse</b>	<b>NP</b>
<b>MP Base Unit</b>	No	Yes	No
<b>Therapulse IV Control Unit</b>	Yes	No	Yes
<b>Therapulse Blanket</b>	Yes	No	No
<b>NP Blanket</b>	No	No	Yes
<b>Charging Unit</b>	Yes (2)	Yes (1)	Yes (1)
<b>Battery Packs</b>	Yes (2)	Yes (1)	Yes (1)
<b>Test Magnet</b>	Yes	Yes	Yes
<b>Manual</b>	Yes	Yes	Yes
<b>Carrying Case</b>	Yes	Yes	Yes

## ABC's of Magnetotherapy

*To effectively apply the therapy to most conditions, and to enhance the success rate, please follow these priorities:*

<b>PRIORITY</b>	<b>SETTING</b>	<b>FREQUENCY</b>
Swelling	Low	2 Hz.
Stimulation	Medium	15 Hz.
Circulation	High	30 Hz.

It is always recommended to consult your veterinarian when using pulsating magnetic fields.

# Operation & Application

## Application & Start-Up

Each Centurion System has been designed for application on a specific part of your horse.

Centurion System	Treatment Region
Therapulse IV	Body of Horse
Centurion NP	Neck
Mini Pulse	Leg, Knee, Hock, Ankle

For the Therapulse and NP, locate the middle spine of the blankets along the spine of the horse and attach the fastening straps provided around the underside of the horse. The Mini Pulse is attached using the two Velcro straps provided, with the control panel located outward for ease of operation. A leg bandage may be beneficial to use underneath the Mini Pulse; this gives the unit stability. The straps of your Centurion System need to be set comfortably yet firmly enough to prevent slippage as your horse perspires.

Once your Centurion System is positioned for use, you may turn on the Controller by pressing and holding the **POWER** button. The 30 minutes time display and the LED of the default 2Hz will illuminate. If you wish to change the frequency, you would press the frequency button. It would toggle among 2Hz, 15Hz and 30Hz.

To initiate the session, press the **START** button. The LED of the selected frequency will start pulsing, indicating output has begun.

Further confirmation of operation can be made by testing the presence of a pulsing field with a test magnet\*. Hold the magnet with thumb on the white side and forefinger on the blue side of magnet – position 1 inch from center of face plate or coil.

Time in the display will count down to zero and will signal with two “beep” sounds. Without any command, the Controller will shutdown by itself in 5 minutes. To turn on the Controller again, you are required to press and hold the **POWER** button. If you wish to turn off the unit, even in the middle of the session, simply press and hold the **POWER** button.

To change the frequency in the middle of the session, follow the following steps:

1. Press the **START/STOP** button
2. Change the frequency
3. Resume the session by pressing the **START/STOP** button

Note: The counting down time will pause and continue again with the selected frequency.

\*NOTE: The magnet provided with your Centurion System is strictly a test device, to be used as described above.



# The Therapulse IV Controller

(used with the Therapulse IV and Centurion NP Systems)



# The Mini Pulse Controller



## Settings

The Centurion Systems are designed so that a horseman and his veterinarian can choose the frequencies most appropriate for the horse.

## Frequency

It is measured in Hertz (Hz), which is the number of pulses per second. Normal earth magnetic energy is 8-10 Hz. The **LOW** setting is below normal magnetic energy and is used with the priority of "SWELLING". This setting is used a great deal in stables.

*It is extremely important to always start a new session at the frequency setting of 2 Hz for the following reasons:*

1. This will precondition the horse to the therapy.
2. It will aid in reducing the swelling in the body in most cases.

We suggest the horse stays on this **LOW** setting of 2 Hz. for a minimum of 3 days.

*However, as long as there is still heat in the affected area, stay on the **LOW** (2 Hz.) setting.*

Once any swelling has been alleviated, you can start working on the priority of "STIMULATION" by using the **MEDIUM** setting of 15 Hz. This setting is above the normal earth magnetic measurement of 8-10 Hz., and it will aid in the stimulation of glands, tissue and muscles. We suggest the horse stay on this **MEDIUM** setting of 15 Hz. for 3-4 days.

The **HIGH** setting of 30 Hz. will affect circulation and aid in further stimulation of tissue. The important thing to remember is that if any swelling returns, the frequency should be put back to the **LOW** setting (2 Hz.).

This table provides a quick reference of Therapulse IV, Mini Pulse and NP settings.

LOW		MEDIUM	HIGH
Swelling	Normal Magnetic Energy	Stimulation	Circulation
2 Hz.	8-10	15 Hz.	30 Hz.

**It is extremely important to be on the right setting at the right time.**

Move the settings up slowly; don't be in a hurry. The settings may be adjusted each day depending upon circumstances. If swelling returns, place the settings back to **LOW**.

## **Back Treatment**

Because the horse's back is a solid muscle mass, you can move through the settings much faster:

First 3 Days	LOW
Second 3 Days	MEDIUM
Seventh Day forward	HIGH

## **Time**

The **Centurion Therapulse IV, Mini Pulse** and **NP** are timed for 30 minute intervals. You may experience more rapid results by doubling the sessions (ex. one morning session + one afternoon session). Should you require a longer therapy session, simply push the **START** button again after the buzzer has sounded to indicate the completion of the first 30 minute session.

## 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/Warning

**CAUTION: Should pain, swelling, inflammation or lameness become worse at any time, discontinue use of Centurion therapy and consult your veterinarian immediately.**

**CAUTION: Only use a Centurion charger to recharge the batteries in your Centurion System. Failure to use the recommended charger unit may damage the system.**

**WARNING: Magnetic fields are in use with this equipment and may interfere with human medical devices such as pacemakers and electronic stimulators.**

## Recharging

The Centurion Mini Pulse, Therapulse IV and NP are battery-powered units and it is cautioned that only a Centurion charger is to be used to recharge the system. It is important to follow this guideline as damage to the equipment may result from the use of unapproved parts.

Battery life will vary depending upon the frequency chosen when applying the therapy. The higher settings use more energy and give shorter battery life.

## **MINI PULSE**

A fully charged Mini Pulse will provide 6 to 12 hours of operating time. When the unit needs recharging, the “**LO**” will display in the time window, and a “beep” sound will emit every 30 seconds for 5 minutes. After that, the unit will turn off itself. Please charge the unit as soon as possible. Ensure that your Centurion charger is rated appropriately to the mains voltage supply (115V or 230V). First, plug the charger directly into the jack located on the controller faceplate. Second, plug the charger into the electrical outlet.

A full recharge cycle will take 10 hours. When charging is complete, remove the charger from the main power supply before removing from the Mini Pulse charger jack.

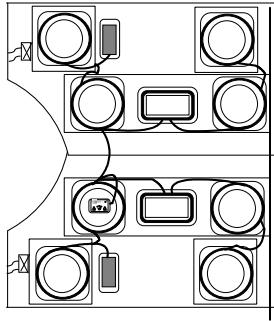
## **THERAPULSE & NP**

The Therapulse controller unit is used with both the Therapulse IV system (2 batteries) and Centurion NP system (1 battery). The Therapulse IV will provide 5 to 6 hours of operating time, and the Centurion NP will provide 6 to 10 hours of operating time. When the batteries need recharging, the “**LO**” will display in the time window and a “beep” sound will emit every 30 seconds for 5 minutes. After that the unit will turn off itself. Please charge the batteries as soon as possible as follow: Disconnect the batteries from their cable assembly, connecting to the charger with the special four-prong plug, and then plugging into the electrical outlet (please ensure that your Centurion charger is rated appropriately to the mains voltage supply – 115V or 230V).

A full recharge cycle will take 16 hours. Unplug the charger from the main power supply before removing from the charger jack on the battery. Reconnect the battery(ies) to the system cable to enable operation of your system.

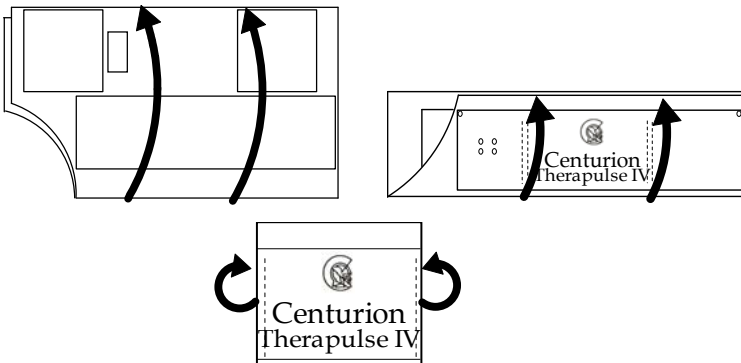
## Maintenance & Storage

The Centurion Therapulse IV and NP blankets may be laundered in a home or industrial washer in cold water and dried with a tumble dry low setting. Prior to laundering the blankets, remove the control unit, batteries, and all coils and connecting cables from the blankets. Use the following diagram when replacing the coils in the blanket.



The Centurion Mini Pulse leather assembly can be wiped clean with a mild detergent solution. Wipe excess water with a dry cloth. Use a damp, well-rung cloth to clean the controller faceplate and connecting cables. Always transport and store your Centurion equipment in the carrying case provided with the product. Store in dry conditions in the temperature range of  $-10^{\circ}\text{C}$  ( $14^{\circ}\text{F}$ ) to  $40^{\circ}\text{C}$  ( $105^{\circ}\text{F}$ ).

Use the following diagram when folding your Therapulse for storage in its carrying case.



## TECHNICAL DATA

	<b>Therapulse</b>	<b>Mini Pulse</b>	<b>NP</b>
<b>Frequency</b>	2,15,30 Hz	2,15,30 Hz	2,15,30 Hz
<b>Timer</b>	30 Minutes	30 Minutes	30 Minutes
<b>Unit Weight</b>	8 Kg 17.6 lb	1 Kg 2.2 lb	3.5 Kg 7.7 lb
<b>Shipping Weight</b>	19 Kg 41.9 lb	2.5 Kg 5.5 lb	8 Kg 17.6 lb
<b>Unit Dimensions</b>	198x360.5cm 78" x 42"	32.5x40cm 12 ¾" x 15 ¾"	197x128.5cm 77 ½" x 50 1/2"
<b>Shipping Dimensions</b>	61.5x24x53.5cm 61 ½" x 24" x 53 ½"	36.5x25x13.5cm 14 3/8" x 9 ¾" x 5 ¼"	47.5x20.5x38cm 18 ¾" x 8" x 15"

The Centurion Therapulse IV, Mini Pulse and NP conform to CE requirements for EC Directive 2004/108/EEC on the basis of 3<sup>rd</sup> Party examination to the following harmonized standards:

EN 61000-6-1:2001 (*EMC Immunity*)

EN 61000-6-3:2006 (*EMC Emissions*)

## **THREE MONTH RENTAL PROGRAM**

If you are like most people, you probably are not sure if this is the type of therapy you want to have in your stable or practice for a lifetime. But, you have probably heard a lot of positive things being said about the Centurion Therapulse IV, Mini Pulse and NP, and you might wonder if the therapy will work for you.

Our three month rental program will allow you to use the therapy in your stable or practice on a trial basis. This program is long enough to enable you to experience the benefits of magnetic field therapy first hand, and short enough that you are not bound to a long term agreement.

At the end of the three month rental period, there are a number of programs available to help you acquire the **Centurion Therapulse IV, Mini Pulse** or **NP** for your stable or practice on a lifetime basis.



## OTHER CENTURION PRODUCTS



### Centurion 4PH:

- Large generator
- 4 Leg Wraps
- Body Blanket
- 2 Splitter Boxes
- Carry Case

A powered unit which can be applied to any part of the horse.

### Centurion 9PH:

- Mini generator
- 2 Leg Wraps
- Splitter Box
- Carry Case



### Centurion Hoof Pad:

Horsemen know that problems often start from the feet.

The Centurion Hoof Pad is designed to operate with either the Centurion 9PH or Centurion 4PH.

## CENTURION BOREAS CS



### COLD COMPRESSION THERAPY

\* INJURIES

\* SPRAINS

\* TENDONS

\* SWELLING

- ▶ Controls inflammatory response after injury and training.
- ▶ Improves blood flow to treated and surrounding tissues.
- ▶ Enhances the lymphatic system helping to reduce edema.
- ▶ Reduces scar tissue in tendon and ligament injury.
- ▶ Reduces pain associated with injury

## **WARRANTY**

Your **Centurion Therapulse IV**, **Centurion Mini Pulse** or **Centurion NP** have a one (1) year warranty from the date of purchase or first day of rental. The unconditional warranty covers any and all problems, including labor and replacement parts (freight excluded). Any repairs or service work done by an unauthorized person or company will void the warranty immediately.

An extended warranty package is available to cover any problems that might arise after the first year. The inexpensive plan covers all parts and will facilitate service.

The warranty is honored at any of our service centers in North America or dealers around the world.



# **Centurion**

## **EQUINE SYSTEM**

Designed and Manufactured by:

**Centurion Medical Corporation**

**#2, 2616, 16<sup>th</sup> Street NE**

**Calgary, Alberta, Canada T2E 7J8**

**Registered ISO Quality System**

### **Sales & Service**

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