



MODEL Pointer Pulse

hand held pulsed Laser and pulsed T.E.N.S.

INSTRUCTION MANUAL

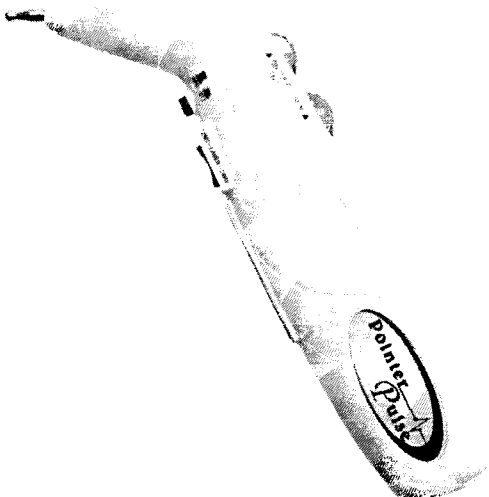
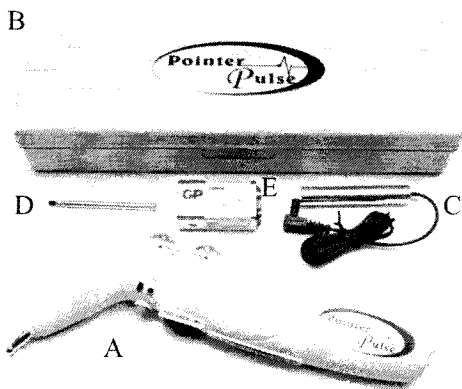


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Contents of the Pointer Pulse:



| | |
|---|-------|
| A) Pointer Pulse unit | 1 pc. |
| B) Hard carrying case | 1 pc. |
| C) Grounding pole | 1 pc. |
| D) Screw driver | 1 pc. |
| E) 9V alkaline battery (Or its equivalent) | 1 pc. |
| F) Instruction manual (not pictured) | 1 pc. |

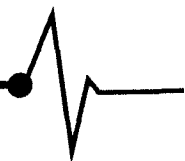
Introduction:



In 1965, Melzack and Wall presented their concept of a gate mechanism for the control of pain. This theory holds that a "T" cell transmits to the dorsal horn, and that the stimulation of large nerve fibers may result in a blocking of pain transmission. Since then, a number of investigators have challenged this "gate control theory", proposing that multiple gates exist in the peripheral and/or central nervous system, and that transcutaneous electrical nerve stimulation (T.E.N.S.) activates one or more of the pain gates, thereby blocking peripheral pain signals from reaching the central processor.

The T.E.N.S. system is designed to be used in the treatment of chronic, acute and postoperative pain. Pain relief varies among patients. Therefore, before using the system, carefully read this manual so that your patient will obtain maximum benefit and pain relief.

Indications:



This manual has been prepared to help you understand what pain is and how your Transcutaneous Electrical Nerve Stimulator (T.E.N.S) works to help relieve pain. It also explains how to use the device, safety precautions and maintenance procedures. Only general information is provided. Should you have questions or if unusual problems arise, do not hesitate to contact your practitioner. They know your situation and can provide answers to your questions or problems.

MODEL Pointer Pulse is a hand held pulsed solid state diode Laser and pulsed T.E.N.S. It is an accurate, easy to operate hand held trigger point locator which incorporates an effective push button stimulation feature, in addition to Laser stimulation. The Laser and stimulation features may be used for the immediate treatment of the point or area following its detection.

In general, Laser and T.E.N.S. devices are used for the symptomatic relief of chronic (long term) intractable pain and as adjunctive treatments in the management of post surgical traumatic pain. Laser treatment is also used as a substitution for acupuncture treatments as it directly irradiates key body points on the surface of the skin.

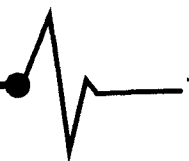
Advantages :

1. Painless and without sensation of numbness - this type of treatment is particularly useful for treating children and people who dislike or are afraid of acupuncture needle treatment.
2. Harmless - since the energy penetrating into the skin is relatively low, it does not cause tissue damage nor pneumothora, which could happen when using an acupuncture needle.
3. Complete sterility - the operation is simple and there is no worry of cross-infection through incomplete sterilization of a needle.

IN EVERY CHRONIC PAIN ETIOLOGY IT IS NECESSARY TO TRY STIMULATION EXTENSIVELY BEFORE DECIDING WHETHER A PARTICULAR PATIENT CAN BE FURTHER TREATED BY LONG-TERM STIMULATION.

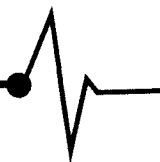
- T.E.N.S. is ineffective for pain of central origin.
- T.E.N.S. devices have no curative value.
- Use-effectiveness of this device is directly related to a patient's response to T.E.N.S. If no positive results are detected, a different treatment method should be used.

Safety Precautions and Contraindications :



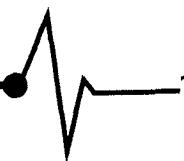
- Heart Patients-Adequate precautionary measures should be considered prior to stimulating patients suspected of having heart disease. Current clinical data cannot sufficiently prove that no adverse results can occur in such patients.
- Carotid Sinus-Do not stimulate over the carotid sinus nerves, especially in patients with known sinus reflex sensitivity.
- Neck Stimulation-Severe spasm of the laryngeal and pharyngeal muscles may occur when the electrode is placed across the neck or the mouth. This may be strong enough to close off the airway.
- Cardiac Pacemakers- Stimulation will inhibit the output of some demand cardiac pacemakers and, therefore, it is not recommended for patients with this type of pacemaker.
- Pregnancy-The safety of electrical nerve stimulation for use during pregnancy or delivery has not been established.
- Other-Electrical nerve stimulation, as far as is presently known, is a symptomatic treatment, and as such may suppress the progress of pain which would otherwise serve as a protective influence on the outcome of a disease process. The potential for physical and / or psychological dependence upon nerve stimulation as a means of relieving pain has not yet been determined.

Safety Precautions and Contraindications :



- It has been noted that some patients find the sensation of electrical stimulation extremely unpleasant. If this situation occurs, this device should not be used on the patient.
- Do not apply electrical nerve stimulation transcerebrally. Do not apply electrical nerve stimulation when pain syndromes are undiagnosed until etiology is established. Electrical nerve stimulation devices should be used only under the continued supervision of a medical professional. Electronic monitoring equipment (such as EKG monitors and EKG alarms) may not operate properly when electrical nerve stimulation is in use.
- Avoid use in post-operative recovery rooms when a heart monitor is on.
- ALWAYS turn off the stimulator when it is not in use. This will save on battery life. The battery is working whenever the device is turned on, even if it is not connected to the patient.
- Do not stare at laser beam directly or through optical instrument.
- Do not use the laser to radiate the eyeballs.
- Do not use the laser to radiate the abdomen of pregnant women.
- Keep out of reach of children.

Battery Information:



Approx. Battery life treatment hours

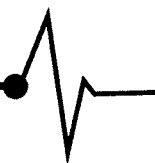
T.E.N.S. treatment is used only : 4 – 20 hours

Laser treatment is used only : 6-10 hours

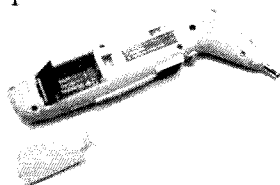
Both Laser and T.E.N.S. treatments are used at the same time : 5 hours

- Do not keep the battery in the unit when the device is not in use.
- Do not dispose of empty batteries in household waste. Take them to special local collection sites.
- To preserve battery power, always turn off the intensity of the stimulator to “O” position after use.

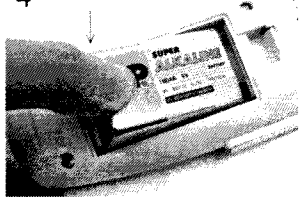
Battery Information:



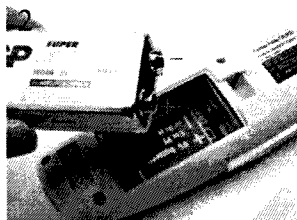
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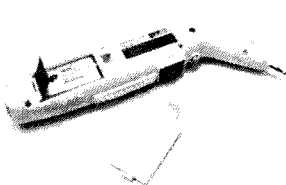
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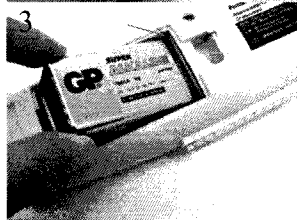
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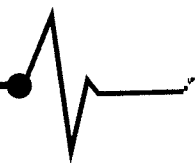
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3



Battery Information:

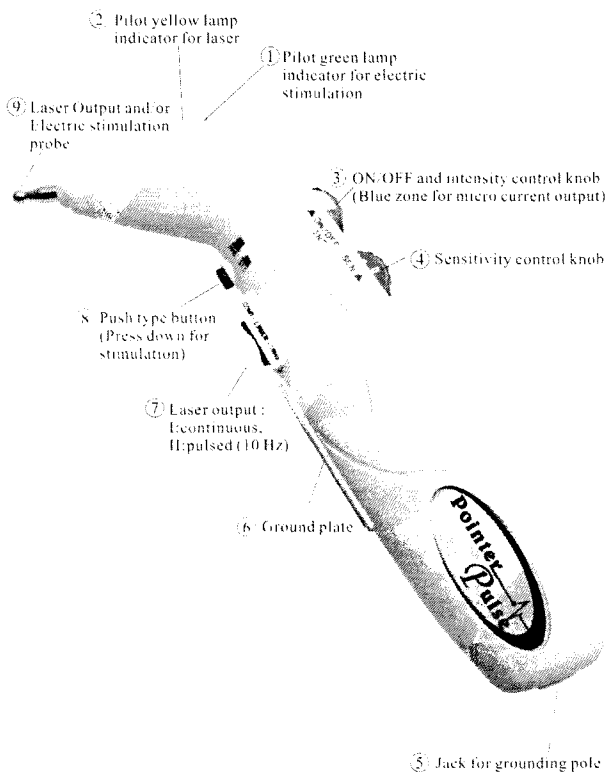
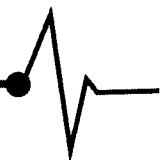


This device requires one 9V alkaline battery, or its equivalent. The battery is replaced by opening the battery door on the side of the device.

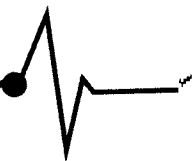
1. Pull the end of the battery door and lift it up, the battery door is open. Remove the old battery and insert the new one.
2. Insert the battery correctly with the polarity according to the diagram shown in the battery compartment label.
- 3,4,5. Make sure the directions of positive and negative poles of battery inserted are correct and be sure you are using a fresh battery.
6. Close the battery door until you hear a "click" sound.

Battery life is 4 to 20 treatment hours depending on how high the current is set, how long each treatment session is and also whether both laser and electric stimulation are used at the same time. Many short treatment sessions will provide longer battery life than fewer longer sessions.

Indications and Controls:

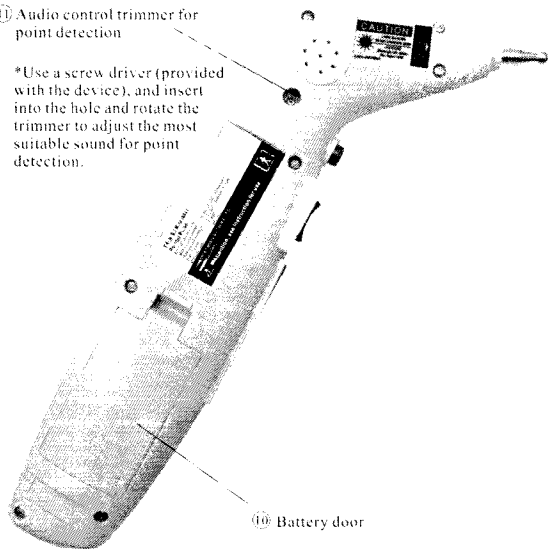


Indications and Controls:



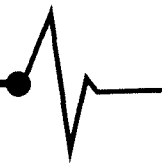
- ⑪ Audio control trimmer for point detection

*Use a screw driver (provided with the device), and insert into the hole and rotate the trimmer to adjust the most suitable sound for point detection.



- ⑩ Battery door

Operation of Controls:



The device consists of the following controls:

- 1) An intensity and ON/OFF control knob on the left, upper side of the unit, to control the intensity of the output through the metal probe electrode, which is located at the front tip of the unit.
- 2) A sensitivity control knob on the right, upper side of the unit, to control the sensitivity of the device during the location of the trigger point.
- 3) A push type button on the left, bottom side of the unit, next to the laser output control switch. Press this button to activate the stimulation mode, which emits a continuous electric pulse of 10 Hz through the metal probe electrode. When the button is not pressed and the unit is on, it remains in point detection mode.
- 4) The laser output control switch is located next to the stimulation/detection push button, on the right, bottom side of the unit. When the switch is in "O" position, the laser is off. When pressing it to "I" position, a continuous output of laser is ON & emitted through the metal probe electrode. When pressing it to "II" position, a pulsed laser of 10Hz is ON & emitted through the metal probe electrode.

There are two pilot lamps on top of the unit, one is in green and the other is yellow. The green one is illuminated when the unit is in the point location or stimulation mode. The yellow one is illuminated when the unit is in laser mode. Both lamps will illuminate when both the laser and electric stimulation/point detection modes are in use at the same time.

Jack:



There is one jack at the end of the unit used for the connection of the hand grounding pole.

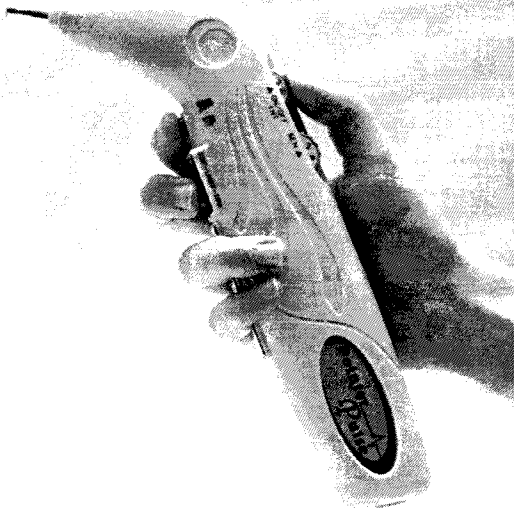
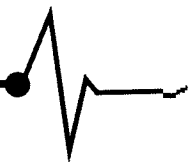


Holding the Unit:



1. Hold the unit as shown in the picture.
2. Use the thumb to control the sensitivity switch, and the ON/OFF Intensity control to turn the unit ON as well as regulate the output of electric stimulation.
3. Press the APD/STI button with the index finger to activate the electrical stimulation.
4. The middle finger can switch on the laser by selecting "I" (continuous) or "II" (pulsed) laser output.
5. Touch the grounding plate with the fourth and fifth fingers for the purpose of "closing the circuit".

Holding the Unit:



Basic Principle:

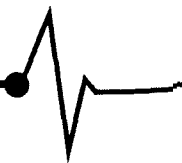
On the body's surface, the electric resistance of trigger or reactive points is lower than in its surrounding areas. They can be readily located by using an instrument which is sensitive to resistance changes.

When the metal probe of the Pointer Pulse touches a low resistance point on the skin, a sound is produced. Its pitch rises with the lowering of the electric resistance of the skin. With this device and method of detection, trigger points that are located usually produce a strong sensation and reaction to electrical stimulation, and will achieve the best therapeutic results.

Features

The POINTER PULSE is an accurate and easy to operate hand held trigger point locator which incorporates an effective push button stimulation feature (10 Hz). It may be used for the immediate treatment of the point or area right after its detection. In addition, a visible, coherent, bright red 650 nm wavelength laser beam is emitted when switching on the laser output. The laser output can be selected as a continuous or pulsed output, with a pulsed frequency of 10 Hz.

Features:



Modern Spring Type Probe Tip

The spring type probe provides a constant pressure to the area or point, increasing accuracy during point location. It is important to note that any part of the body may produce a point location signal depending on the amount of pressure used during location. Thus it is important when locating the point to use the lightest and least amount of pressure possible on the surface of the skin. Also, the movement of the probe when searching for the point should be smooth and graceful, always maintaining the same light uniform constant pressure until the correct point is found. The unique spring mechanism of the Pointer Pulse probe will aid in correcting for any slight variations in the applied pressure.

It is important to keep the inside of the probe tip free of any debris to ensure the laser output is not affected. The probe tip is easily removed by turning it in the counter clockwise direction. Once the tip has been removed, the inside of the probe tip should be cleaned thoroughly. The probe tip can be reattached to the device by turning it in the clockwise direction.

Sensitivity Adjustment

The point detection sensitivity is adjustable. The "SEN" knob is used to either increase (clockwise adjustment) or decrease (counter clockwise) sensitivity when used on different skin conditions (i.e. dry or moist skin conditions). There is also an audio control trimmer on the other side of the unit, which controls the sound level emitted during point detection. Using a screw driver (provided with the device), insert it into the hole and rotate the trimmer to either increase (clockwise adjustment) or decrease (counter clockwise) the audio level.

Features:



Hand Grounding Pole Accessory

The patient must hold the hand grounding pole in order to create a complete electrical circuit. This accessory is easily attached or removed from the unit. It is not necessary to use the grounding pole when treating oneself, providing the hand is in contact with the grounding plate on the unit.

Immediate Point Location and Treatment

The button on the unit is pressed to activate the stimulation mode. While a continuous electric pulse of 10 Hz is emitted through the probe, the intensity may be adjusted from 0 to 45 mA.r.m.s by adjusting the knob labeled "INT". If laser stimulation is required, the laser output control switch is located underneath the stimulation/detection push button. When the switch is in "O" position, the laser is "Off". When pressing it to "I" position, a continuous output laser is emitted. When pressing it to "II" position, a pulsed laser of 10 Hz is emitted through the metal probe electrode, which is located on the front tip of the unit.

NOTE : The stimulation for the Pointer Pulse may be increased by lightly moistening the skin.

Warning: The use of conductive gel with this device is not advised as it will decrease the effectiveness of the laser output and will likely damage the device.

Instructions for Use:



1. Insert the 9 volt battery onto the alkaline battery contacts, the positive and negative poles of the battery should always be matched correctly with the respective battery contacts. A 9 volt or equivalent alkaline battery is recommended for the best performance.
2. For self use, touch the grounding metal plate on the unit and then search for the point.
3. Press each point slightly. The probe uses a spring mechanism so that a constant pressure may be maintained during location. The respective trigger point is located when a continuous sound is heard from the buzzer. At the same time the green LED light located on top of the unit is flashing continuously.
4. The sound emitted from the buzzer during point detection can be adjusted by turning the audio control trimmer of the unit.
5. If stimulation is required on this point, simply adjust the intensity knob "INT" to an acceptable level and press the APD/STI button. When this button is released, the unit immediately returns to the point detection mode. Pressing the APD/STI button again will produce output stimulation.

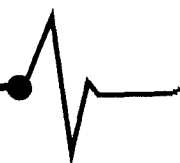
Instructions for Use:



The intensity is controlled with the knob labeled "INT". Turn the switch clockwise to increase the output intensity. Micro current intensity is emitted when the switch is in the "blue" zone. When treating with micro current intensity, there will be very little or no feeling of stimulation, even if the probe is located at the trigger or acupuncture points.

6. It is recommended to begin treatment with a low intensity setting, thereafter turning the "INT" control until a comfortable intensity is reached.
7. If laser stimulation is required, switch on the Laser output to either "I" (continuous output) or "II" (pulsed output of 10 Hz) position.
8. Turn off the laser by switching it to "0" position after laser stimulation is completed.
9. In order to treat patients, the grounding pole must be attached with the plug jack at the end of the unit. The patient must hold the grounding pole to complete the electrical circuit which then activates the detection and stimulation functions. The above procedures 3 to 9 are then followed.
10. Turn off the unit after use. Remove the battery from the unit when the device will not be used for a long period.

Length of Treatment:



The length of treatment or stimulation time depends on the point or area to be treated as well as other factors. Generally, treatment times may vary from 3, 5, 10 seconds for electric stimulation, and 30 to 60 seconds for laser stimulation. Longer times may also be necessary in some cases. The best treatment times and intensities should be selected based on the practitioner's experience and training.

To preserve battery power, always turn off the intensity of the stimulator to "O" position after use.

Accessories & Packing:



- | | | |
|----|--|-------|
| 1. | Spare grounding pole | 1 pc. |
| 2. | Screw driver | 1 pc. |
| 3. | 9V alkaline battery (or its equivalent) | 1 pc. |
| 4. | Instruction manual | 1 pc. |

The unit and its accessories are packed in a hard carrying case.

Technical Specifications :

For Electric stimulation

| | |
|----------------|--|
| Channel | : One |
| Output Current | : micro current, Blue zone on dial (0-2 mA) Black zone on dial (2-45 mA) $\pm 20\%$ (on 500 ohm loading) |
| Pulse Rate | : 10 Hz (fixed) $\pm 20\%$ |
| Pulse Width | : 260 μ S (fixed) $\pm 20\%$ |
| Pulse Shape | : Biphasic Square Wave with a negative spike |
| Wave Form | : Continuous |
| Indicator Lamp | : Green lamp indicates the stimulation & detection mode; yellow lamp indicates laser operation. |

For Laser stimulation

| | |
|----------------------|--|
| Laser Wavelength | : 650nm |
| Maximum Power Output | : 5mW, solid state diode. Do not stare at laser beam directly or through optical instrument. |

Turn the Laser switch to "I" or "II" to operate the device in laser mode. The yellow LED will light when the device is successfully in laser mode. Use "I" position for continuous laser output and "II" position for pulsed laser output. Both positions operate at a frequency of 10 Hz.

| | |
|-----------------|---|
| Power Source | : 9V alkaline battery. Or its equivalent |
| Operation temp | : + 16°C to + 30°C |
| Unit Dimensions | : 210 x 45-85 x 24 mm |
| Unit Weight | : 100 gm (unit only), 380 gm (complete set) |
| Accessories | : 1 spare grounding pole, 1 screw driver, 1 hard carrying case, 1 alkaline battery & 1 instruction manual |

Specifications are nominal and subject to variation from the listed values due to production tolerances

Explanation of Symbols:

The following symbols are used in this TENS device :



On



Off



Read Instruction



Type BF
Equipment




Year of
Manufacture



Laser Caution

Maintenance and Cleaning:



Maintenance

Maintenance of the stimulator is limited to cleaning the stimulator battery contacts and metal electrode.

The stimulator operates on a 9 volt alkaline battery. When adequate stimulation can no longer be maintained, change the battery. The system will provide stimulation only if the battery is properly installed.

Cleaning

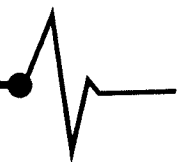
DO NOT IMMERSE THE STIMULATOR IN ANY CLEANING SOLUTION.

The stimulator should be periodically wiped clean using a damp cloth and a solution of mild soap and water. Use of other cleaning solutions may damage the case.

The surface of metal electrodes should be thoroughly washed in a 50% mixture of isopropyl alcohol and water. **DO NOT** soak the electrodes.

The wire of the grounding pole should be wiped clean with a cloth dampened with a mild soap solution and then wiped dry.

Trouble Shooting:



If your unit seems to be functioning improperly, go through the procedures below to determine the causes of the problem.

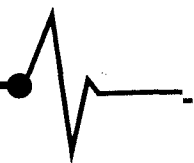
If none of these measures correct the problem, the unit should be serviced.

Note: Do not attempt to repair the unit. Return the unit to your local authorized dealer as listed in this manual for repair or service.

| Problem | Solution |
|--|--|
| Indicator lights up but unit does not function properly. | a. Check control settings to ensure they are set to the values prescribed by your practitioner. b. Check if the laser switch is turned to "I" or "II" position. |
| No indicators light up. | Replace battery with a new one. |
| Sufficient stimulation cannot be maintained. | Replace battery with a new one. |

1. **Battery replacement** - Battery should be replaced whenever sufficient stimulation cannot be maintained.
2. **Care of Device** - The stimulator and metal probe electrode should be kept clean and should not be immersed in any liquid. Handling the device with care will prolong its life and help prevent premature failure.

Storage and Disposal:



Store the unit in a dry location free from dust and contamination where the temperature remains fairly constant and within the range of 16°C to 40°C (61°F to 104°F) .

Do not drop, mishandle, or expose to temperature or humidity extremes <outside the range of 16°C to 40°C (61°F to 104°F), 15-95% RH non-condensing.> Do not use if the unit malfunctions or has been damaged in any manner.

There is generally no restricted shelf life of the device.

Disposal

Please follow the local environmental requirements when disposing of this device.

Limited Warranty:



This warranty is in lieu of any other warranty expressed or implied:

This Pointer Pulse hand held pulsed infra-red Laser and pulsed T.E.N.S. is warranted to the initial purchase ("purchases") and to no other person against any defects in material and workmanship for a period of 1 year from the date of purchase. If the stimulator is found to be defective within the warranty period, it will be repaired or replaced if returned prepaid to an authorized service center. This warranty does not cover damage caused by rental, misuse, negligence, accident, abuse or alternation or modification of the unit.

Repairs after the warranty period will be made and charged to the customers on the basis of rates which are available on request. Except for personal injury, no liability is held in either tort or contract for any loss or damage, direct, consequential, or incidental arising out of the use, misuse or inability to use this product.

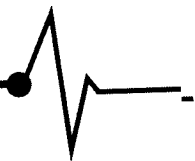
Serial No. _____

(located on the rear side of the unit, next to the battery compartment door)

Date Purchased: _____

Customer : Please record this information

Service:



Service :

Please contact your local dealer, agent or our service department.

**Manufacture date
and Distributor:**



Date of Manufacture : see unit

Dist. By :

..... USA

Blue Moon Health Source
Somerville, MA. 02144
617-840-3545 877-309-8383

Rev 4
39/07