# POINTER EXCEL II<sup>™</sup>

Hand Held TENS and Point Locator with Larger Digital Display and Point Detection Sound Adjustment



# **INSTRUCTION MANUAL**

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## **Contents of MODEL Pointer Excel II Package**

Model Pointer Excel II	1 pc.
Hard carrying case	1 pc.
Detection probe/stimulation probes	
Grounding pole	
Screw Driver	1 pc.
9V battery (PP3, 6F22 or its equivalent) (for demonstration only)	1 pc.
Instruction Manual	1 pc.

### Introduction ......

The model Pointer Excel II is a newly designed, accurate, and easy to operate hand held trigger point locator which incorporates an effective push button stimulation feature. This may be used for the immediate treatment of the point or area following its detection. It features a digital display to show the frequency of stimulation during operation, and numerical display to show the sensitivity of detection during the location of acupuncture points. This unit is fully equipped with distinguished features such as polarity change-over switch, frequency selection and micro current stimulation etc. It is one of the most innovative hand held stimulators available in the market.

## **SAFETY PRECAUTIONS - Warnings**

**Heart Patient-**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

**Pregnancy-**The safety of electrical nerve stimulation for use during pregnancy or delivery has not been established.

Other-Electrical nerve stimulation, as presently understood, 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.

It has been noted that some patients find the sensation of electrical stimulation extremely unpleasant and should probably be excluded from further use of the stimulator.

Do not apply electrical nerve stimulation current 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 physician. 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.

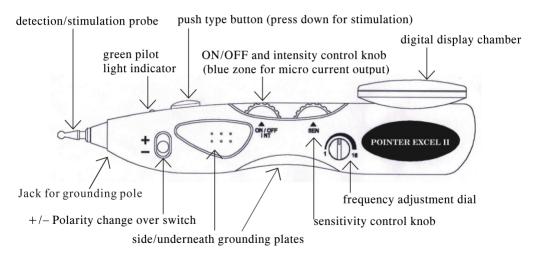
Keep out of reach of children.

Using this device on persons with metal implants, plates or screws is not advised.

# **Battery Information .....**

Your stimulator requires 1 9V battery, use PP3, 6F22 or its equivalent type of battery (Alkaline battery is recommended). The battery is replaced by opening the battery door on the bottom side of the unit. Slide the battery door off, remove the old battery and insert the new one. Insert the battery correctly with the polarity according to the diagram shown in the battery compartment label. Make sure the directions of positive and negative poles of battery inserted are correct and be sure you are using a fresh battery. Close the battery door. Battery life is 4 to 20 treatment hours depending on how high the current is set and how long each treatment session lasts. Many short treatment sessions give longer battery life than fewer longer sessions. To avoid battery leakage, remove the battery if the unit will not be used for an extended period of time.

### Indications and Controls .....



## Additional feature for sound adjustment of point detection



Sound adjustment control trimmer located under the 🔭 symbol

Use the attached screw driver and insert into the hole and rotate the trimmer to adjust the most suitable sound for point detection.

### **Operation of Controls ......**

The device consists of the following controls:

- One sensitivity control knob on the right hand side of the unit to control the sensitivity of the device during the location of the trigger point. The level of sensitivity (by touching the stimulation probe with the ground pole) can be read from the Digital Chamber Display. The higher the value, the higher the sensitivity. During location of trigger or acupuncture points, the number varies and reach maximum when the exact point is located.
- An intensity and ON/OFF control knob on the left hand 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.
- A push type button on the front top of the unit. Press this button to activate the stimulation mode. A continuous electric pulse of 1 to 16 Hz (adjustable) is emitted through the metal probe.
- A frequency adjustment dial which is located under the sensitivity control knob, to adjust the frequency of stimulation from 1 Hz to 16 Hz. The frequency selected can be read from the display chamber when pressing down the push type button on the front top of the unit.
- The Digital Display chamber is located on the rear top side of the unit. It features a digital display to show the frequency (from 1 to 16 Hz) of stimulation during operation, and numerical display (maximum around 500 when sensitivity adjustment to highest range) to show the sensitivity of detection during the location of acupuncture points.

- A sound adjustment control trimmer located under the symbol on the back side of the unit, for control of sound during point detection.
- Polarity change-over switch, located at the front side of the unit, to change the polarity of stimulation from + (for tonification) to-(for sedation), or vice versa.
- There is a green pilot lamp on top of the unit, next to the push type button. This will light up when the point location or stimulation mode is in action.
- Two ground plates, one located at the front left hand side, and the other one underneath the unit, allow the user to hold the unit and touch the ground plate(s) easily in closing the circuit for point detection or stimulation.
- There is one jack on the bottom side of the unit. This is for connecting the hand grounding pole.

## **Basic Principle**

On the body surface, the electric resistance of a trigger point or a reactive point is lower than in its surrounding areas. It can be readily located by means of an instrument which is sensitive to resistance changes. When the metal probe touches a low resistance point, the loudspeaker gives a sound signal. Its pitch rises with the lowering of the electric resistance of the skin. With this instrument and method of detection, trigger points thus located usually produce a strong sensation and reaction to electric stimulation, and will achieve the best therapeutic results.

#### Features .....

- 1) The Digital Display chamber is located on the rear top side of the unit. It features a digital display to show the working frequency (from 1 to 16 Hz) of stimulation during acupuncture treatment when pushing down the stimulation button, and a numerical display (maximum around 500 when sensitivity is adjust to the highest range) to show the sensitivity of detection during the location of acupuncture points. When used in Acupuncture or trigger point detection, the digital display will show the location of the acupuncture point in numerical form. During acupuncture location, the highest numerical value refers to the nearest site of acupuncture point. The green indication LED will light continuously when the acupuncture point is located.
- 2) Polarity change-over switch which allows the output stimulation to reverse its polarity of stimulation from + (for tonification) to - (sedation) or vice versa, easily during treatment. When doing this, the output intensity should be turned down first in order to avoid a sudden increase in intensity.
- 3) Acupuncture treatment through the probe may be used for the immediate treatment of the point or area right after its detection on the patient, by simply pushing down the stimulation/detection button on top of the unit. The button on the top of the unit may be pressed to activate the stimulation mode. A continuous electric pulse of 1 to 16 Hz (adjustable by turning the frequency dial) is emitted through the probe, the intensity may also be adjusted. The intensity is controlled with the intensity knob labeled "INT". 10

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 when the probe is located at the trigger or acupuncture points.

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

- 4) Modern Spring Type Probe Tip
  - This new improved interchangeable spring type probe provides a more constant and comfortable pressure to the area or points, thus providing better accuracy during point location. It is important to note that any part of the body may be induced to produce a point location signal depending on the amount of pressure used during location. Thus, it is important when locating the trigger points to use the 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 light, uniform, and constant pressure until the correct point is found. The unique spring mechanism of the Pointer probe will assist in correcting any slight variations in the applied pressure.
- 5) Interchangeable Probes

Two probes are provided for applications. The probe may be suited for ear points and the body.

6) 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). The level of sensitivity can be read from the Digital Display Chamber.

- 7) 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. (Note: this unit may also be used
  - This accessory is easily attached or removed from the unit. (Note: this unit may also be used without the grounding pole. However, in this case the practitioner must contact both the grounding plate(s) on the unit with one hand as well as hold the bare skin of the patient with the other hand to complete the circuit.) The grounding pole is not necessary when using on oneself, providing the grounding plate(s) on the unit is contacted.
  - 8) Frequency adjustment dial, to adjust the frequency of stimulation from 1 Hz to 16 Hz. The frequency selected can be read from the display chamber when pressing down the push type button on the front top of the unit.
  - 9) Two ground plates, one located at the front left hand side, and the other one underneath the unit, to allow the user (or left handed user) to hold the unit and touch the ground plate(s) easily in closing the circuit for point detection or stimulation.
  - 10) Additional Feature is added to this New Pointer Excel II unit "Sound adjustment" to adjust to the most suitable sound during point detection.

#### INSTRUCTIONS FOR USE

- 1. Insert the 9 volt battery onto the battery clips, the positive and negative poles of the battery should always be matched correctly with the respective battery clips. A 9 volt alkaline battery is recommended for the best performance.
- 2 Use the supplied probes as prescribed by your family practitioner for treatment.
- 3. For self-use, touch the grounding metal plate(s) on the front side or underneath the unit and then search for the point.
- 4. 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 and at the same time the LED light located in front of the Loc/Stim button is flashing continuously. The sound emitted during point detection can be adjusted by simply rotating the trimmer located on the back side of the unit (clockwise to increase, and anti-clockwise to decrease).
- 5. If stimulation is required on this point, simply adjust the intensity knob "INT" to an acceptable level and press the Loc/Stim button. When this button is released, the unit is immediately returned to the point detection mode. Pressing the Loc/Stim button again will produce output stimulation. 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. In order to treat patients, the grounding pole must be attached with the plug jack to the bottom of the unit. The patient must hold the grounding pole to complete the electrical circuit which then activates the detection and stimulation functions.
- 8. This device is equipped with a Polarity change-over switch. If a positive (+ for tonification) or negative (- for sedation) pulse stimulation is required, simply set the switch to + or position.
- 9. The Digital Display chamber is located on the rear top side of the unit, it features a digital display to show the frequency (from 1 to 16 Hz) of stimulation during operation, and numerical display (maximum around 500 when sensitivity adjustment to highest range) to show the sensitivity of detection during the location of acupuncture points.
- 10. Turn off the unit after use. Remove the battery from the unit when the device will not be used for a long period of time.

#### 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, longer times may also be necessary in some cases. The best treatment times and intensities should be selected based on the practitioners experience and training.

## Accessories & Packing .....

1. Detection probes/stimulation probes	2	pcs
2. Screw driver for sound adjustment	1	pc.
3. Spare grounding pole	1	pc.
4. 9V battery (PP3, 6F22 or its equivalent) (for demonstration only)	٠1	pc.
5. Instruction manual		

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

#### **TECHINICAL SPECIFICATIONS:**

Channel : one

Power Source

Output Current : micro current, blue zone on dial (0-2 mA)

2-45 mA r.m.s (black zone on dial)

 $\pm 20\%$  (on 500 ohm loading)

Pulse Rate : 1- 16 Hz (adjustable)  $\pm$  20 %

Pulse Width :  $260 \,\mu\text{S} \pm 20\%$ 

Pulse Shape : Asymmetric Square Wave

Wave form : continuous

Indicator Lamp : Green lamp to show the pulse rate of the unit during stimulation. And lights "on"

during the detection of point.

Digital Chamber Display : show the frequency (from 1 to 16 Hz) of stimulation during operation, and numerical

display (maximum around 500 when sensitivity adjustment to highest range) to show

the sensitivity of detection during the location of acupuncture points.

: 9V battery, type PP3, 6F22, or its equivalent (A 9 volt alkaline

battery is recommended)

Operation temp :  $10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  ( $50^{\circ}\text{F}$  to  $104^{\circ}\text{F}$ )

Unit Dimensions : 225 x 50 x 38 mm

Unit Weight : 90 gm (unit only), 380 gm (complete set)

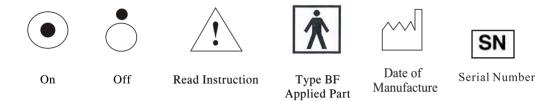
AccessoriesUnit : 2 detection probes/stimulation probes, 1 pc. screw driver, 1 spare grounding pole,

1 hard carrying case & 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 device:



#### **MAINTENANCE**

Maintenance of the stimulator is limited to cleaning the battery contacts and metal electrodes. The stimulator operates on a 9 volt battery (A 9 volt alkaline battery is recommended). When adequate stimulation can no longer be maintained, change the battery.

Remove the old battery and replace it with a new one. 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 metal electrodes should be thoroughly washed in a 50% mixture of isopropyl alcohol and water. The wire 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, check the procedures below to determine what may be wrong. If none of these measures correct the problem, the unit should be serviced. **Do not attempt to repair the unit by yourself!** Return the unit to your local authorized dealer or to the manufacturer as listed in this manual for repair or service.

- 1. Battery replacement-Battery should be replaced whenever sufficient stimulation cannot be maintained.
- Care of Device The stimulator and metal probe electrodes should be kept clean. The stimulator should not be immersed in any liquid. Avoid rough use will help prevent premature failure.

Problem	Possible Solution
	Check control settings, are they set to values required. Check if frequency control is turned on ( not too low, or at zero setting)
No indicators lights up.	Replace battery with a new one

## Storage and Transportation .....

Store unit in a dry location free from dust and contamination where the temperature remains fairly constant and within the range of  $-16^{\circ}$ C to  $40^{\circ}$ C (3.2°F to  $104^{\circ}$ F)

Do not drop, mishandle, or expose to temperature or humidity extremes < outside the range of -16°C to 40 °C (3.2°F to 104°F), 15-95% RH non-condensing> Do not use if the unit malfunctions or has been damaged in any manner.

Basically the device can be used until it malfunctions. There is generally no restricted "shelf-life" of the device.

### Disposal:

Please follow the local environment requirement when disposes the device.

## Limited Warranty .....

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

This Pointer Excel II is warranted to the initial purchaser ("purchases") and to no other person against any defects in material and workmanship for a period of one 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, alteration, 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

Manufacture date .....

Date of Manufacture: See unit

Dist. By: Lhasa OMS, Inc., Weymouth, MA. USA.

Made in China Rev 6 2020-08