Precautionary instructions

The precautionary instructions found in this section and throughout this manual are indicated by specific symbols. Understand these symbols and their definitions before operating this equipment. The definitions of these symbols are as follows:

⚠️ **CAUTION** - Text with a “CAUTION” indicator will explain possible Safety infractions that could have the potential to cause minor to moderate injury or damage to equipment.

⚠️ **WARNING** - Text with a “WARNING” indicator will explain possible Safety infractions that will potentially cause serious injury and equipment damage.

⚡ **DANGER** - Text with a “DANGER” indicator will explain possible safety infractions that are imminently hazardous situations that would result in death or serious injury.

**NOTE**: Throughout this manual, “NOTE” may be found. These NOTES are helpful information to aid in the particular area or function being described.
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1. INSTRUCTIONS FOR THE USER OF X-TRAINER

Please read this instruction manual carefully before using X-TRAINER because it is unsafe to start using the device before reading the whole manual. The instructions on the following pages will show you how to use and care for your X-TRAINER in a general manner. You should be particularly familiar with the prescription information and precautions before proceeding.

- DO NOT operate this unit in an environment where other devices are being used that intentionally radiates electromagnetic energy in an unshielded manner.
- DO NOT use sharp objects such as a pencil point or ballpoint pen to operate the buttons on the touch screen.
- This unit should be operated in temperatures between 15°C and 35°C, transported and stored in temperatures between 5°C and 45°C, with Relative Humidity ranges from 30% to 60%.
- The X-TRAINER system is not designated to prevent the ingress of water or liquids. Ingress of water or liquids could cause malfunction of internal components of the system and therefore create a risk of injury to the patient.

1.1 WARNINGS

- The long-term effects of chronic electrical stimulation are unknown.
- Stimulation should not be applied over the carotid sinus nerves, particular in patient with known sensitivity to the carotid sinus reflex.
- Stimulation should not be applied transthoracically in that the introduction of electrical current into the heart may cause cardiac arrhythmias.
- Stimulation should not be applied over swollen, infected, or inflamed areas or skin eruption, e.g. phlebitis, thrombophlebitis, varicose veins, etc.
- Stimulation should not be applied over, or in proximity to, cancerous lesion.
- Stimulation should not be applied over the neck or mouth. Severe spasm of the laryngeal and pharyngeal muscles may occur and the contractions may be strong enough to close the airway or cause difficulty in breathing.
- Stimulation should not be applied transcerebrally.
- Make certain the unit is electrically grounded by connecting only to a grounded electrical service receptacle conforming to the applicable national and local electrical codes.
• To prevent electrical shock, disconnect the unit from the power source before attempting any maintenance procedures.

• Keep electrodes separated during treatment. Electrodes in contact with each other could result in improper stimulation or skin burns.

• Output current density is related to electrode size. Inadequate electrode contact area may result in patient injury. Please consult the enclosed manufacturer's table for recommended electrode area to be used with the device. If any additional question arises regarding the electrode size, consult a licensed practitioner or the manufacturer prior to the therapy session.

• Stimulation should not be applied over the spinal cord area following laminectomy.

• Stimulation should be not applied on the neck and/or head including mouth and or eyes. Severe spasm of the laryngeal and pharyngeal muscles may occur and the contractions may be strong enough to cause difficulty in breathing or close the airway.

• This device should not be applied on the anterior aspect of the chest (i.e. thorax)

• As per FDA regulation, this device is only available for sale on the order of a physician.

• If symptoms persist, contact doctor.

• To be used exclusively on uninjured skin.

• To be used exclusively with adaptor from manufacturer.

• To be used exclusively with electrodes from manufacturer.

• Simultaneous connection of a patient to a h.f. surgical equipment may result in burns at the site of the stimulator electrodes and possible damage to the stimulator

• Operation in close proximity (e.g. 1 m) to a shortwave or microwave therapy equipment may produce instability in the stimulator output.

**1.2 DANGER:**

Densities for any electrodes exceeding 2.0mA/cm² (RMS) may require the special attention of the user.

• Improper handling or use of this device may result in a high risk of death or serious injury.

• Stimulus delivered by the waveforms of this device, in certain configurations, will deliver a charge of 25 micro coulombs (µC) or greater per pulse and may be sufficient to cause electrocution. Electrical current of this magnitude must not flow through the thorax because it may cause cardiac arrhythmia.

• Patients with an implanted Neurostimulation device must not be treated with or be in close proximity to any shortwave diathermy, microwave, diathermy, therapeutic ultrasound
diathermy, or laser diathermy anywhere on their body. Energy from diathermy (shortwave, microwave, ultrasound and laser) can be transferred through the implanted Neurostimulation system, can cause tissue damage, and can result in severe injury or death. Injury, damage, or death can occur during diathermy therapy even if the implanted Neurostimulation system is turned off.

1.3 **INDICATIONS FOR USE:**

Handle clean, and dispose of components and accessories that have come in contact with bodily fluids according to National, Local and Facility rules, regulations and procedures.

**X-TRAINER** is indicated to be used as under **Electrical Muscle Stimulation (EMS)** for:

- Relaxation of muscle spasms
- Prevention or retardation of disuse atrophy
- Increase local blood circulation
- Muscle re-education
- Maintaining or increasing range of motion
- Immediate post-surgical stimulation of calf muscles to prevent venous thrombosis
- For strengthening of Muscles

1.4 **CONTRAINDICATIONS:**

**X-TRAINER** should not be used in the following areas:

- Around the mouth
- Eye Area (Orbicularis Oculi Muscle), Genitals and Transcerebral Area
- Mid-line facial and throat area (vertical center)
- Groin area

**Powered Muscle Stimulation**

- Muscle stimulation is contraindicated for patients with:
  - Cardiac pacemaker
  - Malignancy in the area to be treated
  - Implanted medical device other than a pacemaker such as implanted deep brain stimulation device.
- This device must not be used by Pregnant Woman, Implantable Devices, Patients with Cardiac Problems.
- This device should not be used when cancerous lesions are present in the treatment area without express permission from the doctor handling cancer treatment
- Stimulation should not be applied over swollen, infected, inflamed areas or skin eruptions (e.g. phlebitis, thrombophlebitis, varicose veins, etc.)
- Other contraindications are patients suspected of carrying serious infectious disease and or disease where it is advisable for general medical purpose, to suppress heat or fevers.

- Electrode placements must be avoided that apply current to the carotid sinus region (anterior neck) or transcerebrally (through the head).
1.5 PRECAUTIONS

- Caution should be used for patient with suspected or diagnosed heart problems.
- Caution should be used for patients with suspected or diagnosed epilepsy.
- Caution should be exercised in presence of following:
  - When there is a tendency of hemorrhage following acute trauma or fracture.
  - Following recent surgical procedures when muscle contraction may disrupt the healing process.
  - Over the menstruating uterus.
  - Over area of the skin which lacks normal sensation.
- Some patients may experience skin irritation or hypersensitivity due to the electrical stimulation or electrical conductive medium. The irritation can usually be reduced by using an alternate conductive medium or alternate electrode placement.
- Electrode placement and stimulation settings should be based on the guidance of the prescribing practitioner.
- The X-TRAINER may be susceptible to interference originating from short-wave diathermy units operating in close proximity to it (approx. 3m). Avoid operating the X-TRAINER adjacent to and simultaneously with operating short-wave devices.
- Powered muscle stimulators should be used only with the lead wires and electrodes recommended for use by the manufacturer.
- Pulse rates above 60 Hz or constant modes should be used only for relaxation of muscle spasms. Operating the device above this pulse rate can lead to muscle fatigue.
- The X-TRAINER should be kept out of the reach of children.

1.6 ADVERSE REACTION:

- The X-TRAINER should not be used while driving, operating machinery, or during any activity in which involuntary muscle contraction may put the user at undue risk of injury.
- Skin irritation and burns beneath the electrodes have been reported with the use of powered muscle stimulators. Be aware that small electrode areas and high output currents can cause burns; consult the table in this manual, ask a licensed practitioner if any question arises.
- Some patients may experience skin irritation or hypersensitivity due to the electrical stimulation or electrical conductive medium. This irritation can usually be reduced by using an alternative conductive medium or an alternative electrode placement.
- Headaches and other painful sensations may occur during or following the application of electrical stimulation near the eyes and to the head and face.
2. **INTRODUCTION**

NeuFit is a system that uses a bio-electrical current (the X-TRAINER) simultaneously with active range-of-motion and other exercise techniques to significantly accelerate the recovery of all soft tissue injuries. It also speeds up the body's natural recuperative abilities.

3. **DESCRIPTION**

X-TRAINER is a Muscle Stimulator for applying electrical currents to the body to stimulate or relax muscles. It is a microcomputer-controlled, 4 channel device ideal for professionals in all areas of physical medicine. It has an easy user interface and versatility to simultaneously work on different body areas.

This aesthetically designed clinical model has 3 selectable modes, each with the ability to control different output parameters.

### 3.1 FEATURES:

- Dual wave technology: The output signal is comprised of two wave forms. The first is an adjustable frequency, “active,” pulsed direct current. The second is a 10kHz “background” wave form, which helps the first wave form penetrate into the body with less stinging, burning, or skin discomfort.

- Touch screen

- 4 Channels, which can be operated in groups (Ch 1 and 2 as a group, Ch 3 and 4 as another group, or synced such that Ch 1, 2, 3, and 4 operate together as one group)

- Three operating modes: Mapping, Treatment, and Training

- Depending on operating mode, the output power, main pulse frequency, and/or duty cycle may be selected on the touch screen and the value changed with the dial.
4. **ACCESSORIES**

X-TRAINER comes with the necessary components. Below is a list of items that are included:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Particular</th>
<th>Qty</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>User Manual</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Cord to plug X-TRAINER into standard 120V wall outlet</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Lead wires to connect electrodes to X-TRAINER, each lead wire is 10’ long,</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>with a 5-pin port connecting to X-TRAINER on one end and a red and black pin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>on the other end, each connecting to one electrode</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Carbon Electrodes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2” Diameter</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>3” Diameter</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>4” Diameter</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Sponges for Carbon Electrodes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2” Diameter</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>3” Diameter</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>4” Diameter</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Adhesive Electrodes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2” x 4” Rectangles, pack of 4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>2” diameter circle, pack of 4</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Wraps to hold electrodes on skin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2” x 24”</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2” x 48”</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>6” x 48”</td>
<td>4</td>
</tr>
</tbody>
</table>
## 5. SPECIFICATION

### 5.1 DEVICE SPECIFICATION

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>330 mm</td>
</tr>
<tr>
<td>Width</td>
<td>340 mm</td>
</tr>
<tr>
<td>Height</td>
<td>165 mm</td>
</tr>
<tr>
<td>Standard Weight</td>
<td>Approx 4.5 Kg.</td>
</tr>
<tr>
<td>Power Input</td>
<td>110 - 220 VAC, 50/60 Hz</td>
</tr>
<tr>
<td>Electrical Class</td>
<td>CLASS II</td>
</tr>
<tr>
<td>Electrotherapy Electrical Class</td>
<td>TYPE BF</td>
</tr>
<tr>
<td>Operating Temperatures</td>
<td>Between 15° C to 35° C</td>
</tr>
<tr>
<td>Storage Temperatures</td>
<td>Between 5° C to 45° C</td>
</tr>
</tbody>
</table>
## 5.2 TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Background pulse Frequency</td>
<td>10kHz</td>
</tr>
<tr>
<td>2. Frequency Period of Background Pulse</td>
<td>100μSec</td>
</tr>
<tr>
<td>3. Main pulse frequency</td>
<td>1 - 500pps</td>
</tr>
<tr>
<td>4. Duration of low frequency impulse</td>
<td>460μSec</td>
</tr>
<tr>
<td>5. Max peak impulse current delivery per channel</td>
<td>100mA</td>
</tr>
<tr>
<td>6. Max charge per impulse per channel</td>
<td>46μC</td>
</tr>
<tr>
<td>7. Max RMS output voltage</td>
<td>62.5V</td>
</tr>
<tr>
<td>8. Max RMS power delivery per channel</td>
<td>2.5W</td>
</tr>
<tr>
<td>9. Impulse intensity adjustment</td>
<td>0 - 100% in 1% increment</td>
</tr>
<tr>
<td>10. Typical Impulse rise time (20-80%)</td>
<td></td>
</tr>
<tr>
<td>11. Output Mode</td>
<td>Electrodes</td>
</tr>
<tr>
<td>12. Waveform</td>
<td></td>
</tr>
</tbody>
</table>

Waveform is similar to this public domain waveforms:
6. CONTROLS & FUNCTIONS

X-TRAINER is an innovative touch screen desktop device providing Electronic Stimulation through four channels.

As we rotate the Intensity Control Knob, the Intensity on the screen keeps on increasing. The value of intensity set is also displayed on the screen.
Given below are pictures and detailed description of the elements of the touch screen interface.

On the Home Screen, Choose MAPPING MODE, RECOVERY MODE, OR TRAINING MODE. In each mode, you can control the Intensity, Frequency, Work Time, and Rest Time when they are shown in white boxes, while the values are fixed when shown in gray boxes. The activated Channels are green (the Channel 1 & 2 / Channel 3 & 4 Buttons) while the inactive one(s) are gray.
1. Operating Mode
2. Intensity for Channels 1 & 2
   (setting is able to be adjusted by the dial when the orange border outline is present)
3. Frequency for Channels 1 & 2
4. Work Time for Channels 1 & 2
5. Rest Time for Channels 1 & 2
6. Channel 1 & 2 Power Button
7. Polarity Control for Channels 1 & 2
8. Sync Button to simultaneously turn on or off Channels 1 & 2, and Channels 3 & 4
9. Timer - The Minutes and Seconds can be set individually by touching the box and changing value with the dial
10. Return to Home Screen
11. Intensity for Channels 3 & 4
12. Frequency for Channels 3 & 4
13. Work Time for Channels 3 & 4
14. Rest Time for Channels 3 & 4
15. Channel 3 & 4 Power Button
16. Polarity Control for Channels 3 & 4
6.2 STARTING THE DEVICE / INSTALLATION

- Keep the X-TRAINER on a stable surface.
- Connect the adaptor’s AC cord into a grounded wall outlet that has 110-220 VAC, 50/60Hz. Your power supply must match the voltage requirements.

![Image of X-TRAINER back with power cord and adaptors]

Insert 110-220 VAC, 50/60Hz AC cord as shown in the fig.

![Image of X-TRAINER side with electrode cables]

Insert all electrode cables as shown in figure

![Image of X-TRAINER side with switch on]

Switch on the Device

**NOTE:** Do not connect the X-TRAINER to a power supply rated differently than that described above. Avoid operating the X-TRAINER adjacent to and simultaneously with operating short-wave devices, as it may be susceptible to interference originating from short-wave diathermy units.

Welcome Screen will be displayed followed shortly by the Main Menu Screen.
6.3 START/STOP A TREATMENT

a) After the Welcome Screen, the Main Menu Screen appears as below.

Tap on Mode to select an individual Treatment.

NOTE: Programs Screen will appear to select the channel or Parameters

After selecting the parameters tap on channel to start treatment.

Parameter setting screen will appear after tapping on the desired mode/program.

Treatment can be started by tap on start button with default parameters.

Other parameters also can be customized by changing its values by selecting each option and changing the values by rotating the dial.

Tap on Channel button to run the treatment and rotate the knob to increase the intensity. To stop a running treatment just tap on the channel button.

Other channel or available group of channels can be started during a running treatment. Tap on other channel to start another treatment and follow the above steps.
7. LCD SCREEN OPERATION

Definition of Terms

- **Device Mode** = The operating mode, selected from Mapping, Recovery, and Training. In all modes, the device emits the same type of output current, but with the ability to change different parameters of that current.

- **Output Current** = The output signal from the device. It is a combination of two wave forms, the “active,” lower frequency wave form (adjustable from 5-500 Hz), and the “background,” higher frequency wave form (fixed at 10 kHz). The active wave form is the one that you feel, and the background is present to help the active wave form penetrate into the body with less surface discomfort.

- **Mapping Mode** = Mode in which the output current amplitude can be adjusted from 1-100, while the frequency of the active wave form is fixed to 500 Hz and the work and rest periods are set to 1s work and 0s rest.

- **Recovery Mode** = Mode in which the output current amplitude can be adjusted from 1-100; the frequency can be adjusted from 5-500 Hz in increments of 1 Hz; the work interval can be set from 1-20 s in increments of 1s; and the rest interval can be set from 0-20s in increments of 1s. This mode is intended to be used for recovery and rehabilitation. The finer frequency adjustments allow a practitioner to scan through frequency ranges to detect whether there is a “resonant frequency” at which the client's tissues become most reactive.

- **Training Mode** = Mode in which the output current amplitude can be adjusted from 1-100; the frequency can be adjusted from 5-500 Hz, via the preset values of 5 Hz, 10 Hz, 25 Hz, 40 Hz, 55 Hz, 75 Hz, 100 Hz, 160 Hz, 250 Hz, and 500 Hz; the work interval can be set from 1-20 s in increments of 1s; and the rest interval can be set from 0-20s in increments of 1s. This mode is intended for use in strength training, where the most commonly used frequency values are pre-programmed for ease of moving among those values.

- **Channel** = The port from which current is being emitted. There are four channels: Ch 1, Ch 2, Ch 3, and Ch 4.

- **Lead wire** = The cable that connects one port to electrodes. On the device end, there is a 5-pin male connector that matches the female input on the front of the X-TRAINER. On electrode end, there is one negative/black pin and one positive/red pin.

- **Intensity** = The percentage of the maximum output power amplitude, which can be adjusted with the dial from 0-100% in increments of 1%.
• **Frequency** = The frequency of the active wave form. Depending on which Mode you are using, it can or cannot be adjusted with the dial. It is fixed at 500 Hz in Mapping Mode, can be adjusted from 5-500 Hz in increments of 1 Hz in Recovery Mode, and can be adjusted among 10 preset values in Training Mode.

• **Work Time** = Paired with “Rest Time,” this value gives the time interval during which the active wave form will be on during every cycle. For example, Work Time = 2s and Rest Time = 2s would yield a 2s On / 2s Off cycle; Work Time = 1s and Rest Time = 0s would yield a 1s On / 0s Off cycle (equivalent to saying all work and no rest). The Work time can be adjusted from 1-20s in increments of 1s.

• **Rest Time** = Paired with “Work Time,” this value gives the time interval during which the active wave form will be off during every cycle. Because the output current is a dual wave (having both the “active” and “background” wave forms), during the Rest Time the “active” wave form is off and the “background” is still being emitted. Though it may feel as if the signal is off, this “background” wave form will still be emitted (as long as the Output Power is not zero). “Background” is a 10 kHz wave form, with a much narrower pulse width and, hence, a much lower amount of energy delivered. It has similar parameters to a “microcurrent-” style electrical stimulation.

• **Polarity** = Direction of current flow. Conventionally, electrons flow away from the negative/black terminal and towards the positive/red terminal. This is the default mode, when the polarity indicator is green and reads “Pos.” The direction of electron flow can be reversed, which will happen when the polarity indicator is red and reads “Neg.”

• **Sync** = The ability to combine Channels 1, 2, 3, and 4 so that they are all controlled together. They can also be operated independently in two groups (Ch 1 and 2 as one group, and Ch 3 and 4 as the other group).

• **Timer** = The device has an optional timer. The device can be started without the timer, in “free-running” mode, where it will continue to run until it is manually powered off. If user desires to run the device for a certain period of time, the timer can be set before running the current. If the timer is set, it will start counting down as soon as the current is initiated. At the end of the timer, the device will beep, and it will automatically shut off the output power.

• **Power Reset** = Pressing down on the dial, which automatically turns off the output power.
THE HOME SCREEN

This is the first screen to appear when device powers on. From this screen, you can touch a button to select either Mapping Mode, Recovery Mode, or Training Mode.

In all modes, the Channels can be operated in groups or synced together. There is an option to select Channels 1 & 2, which is done by pressing the Channel 1 & 2 button shown here in light green.

In all modes, the Channels can be operated in groups or synced together. There is an option to select Channels 3 & 4, which is done by pressing the Channel 3 & 4 button shown here in light green.

Alternatively, both groups can be synced, such that all 4 channels are operated together. This is done by pressing the Sync button, shown here in light green. Note that, when operating with the Channels in Sync, the Channel 3 & 4 Column turns gray and all channels are controlled by the values in the Channel 1 & 2 column.
In this mode, user can select whether to use one group (Ch 1 and 2, selected by pressing the Channel 1 & 2 Button), another group (Ch 3 and 4, selected by pressing the Channel 3 & 4 Button), or both groups together (Ch 1, 2, 3, and 4, by pressing the Sync button). The frequency, work time, and rest time are fixed, and cannot be adjusted, hence the boxes appear in the gray color.

**RECOVERY MODE**

In this mode, user can select whether to use one group (Channel 1 & 2), another group (Channel 3 & 4), or both groups together (Sync). The frequency, work time, and rest time can also be edited, hence the boxes appear in white. To edit those settings, press the box on the touch screen, and then use the dial to increase or decrease the value.
Training Mode

In this mode, user can select whether to use one group (Channel 1 & 2), another group (Channel 3 & 4), or both groups together (Sync). The frequency, work time, and rest time can also be edited, hence the boxes appear in white. To edit those settings, press the box on the touch screen, and then use the dial to increase or decrease the value.
8. HOW TO OPERATE X-TRAINER

8.1 PREPARING ELECTRODES

- Use only the electrode cables and electrodes provided with the device by manufacturer.

- Make sure that the entire surface of the electrode is in firm contact with the skin.

- Prepare the skin prior to electrode application. Cleaning of skin shall eliminate any impairment to current conduction on the patient's skin such as an oily or dry surface, or excessive hair coverage. Shaving may be necessary depending upon the density of hair coverage.

- Failure to provide for maximum current conduction efficiency could result in skin irritation relating to increase in current density at electrode site.

- We strongly recommend careful maintenance of the electrodes. This includes the maintenance of electrode cable and the electrodes. Worn cables and/or poor electrodes (or wrong sized electrodes) can have a significant impact upon treatment results.

8.2 PREREQUISITES

- Electrodes should never be placed in such a manner as to produce current flow through the cardiac area.

- The patient should be suitably positioned ensuring maximum comfort and suitable exposure of the body part to be treated.

- Carefully mark the points where electrodes are to be placed and place the electrodes accordingly. The electrodes should be applied on the marked points.

- The desired mode on the X-TRAINER should be selected and set.

- The patient should be explained about the subjective sensory motor feeling that he/she will experience. The patient should experience a sensation of deep, sufficiently strong but pleasant vibrations at rhythmical frequencies and a pleasant tingling sensation.

- Patient should immediately inform the therapist, of any unpleasant sensation or any other discomfort, as this likely means there is an issue with electrode connectivity.

8.3 PREPARING THE SKIN:

- Before applying electrodes, ensure that the areas selected for electrode placement are cleaned properly and the skin is clear and free of surface debris.
8.4 STARTING THE DEVICE:

- Keep the X-TRAINER on a stable surface.
- Connect the female end of the Adaptor cord into the power input on the back of X-TRAINER, and connect the male end to a standard, North American, 110-V grounded wall outlet.
- Turn the Green Power switch to On. (0 = “off” and 1 = “on”)
- You will see the NeuFit logo appear and the device will take several seconds to boot up.

8.5 SELECTING OPERATING MODE

- At the home screen, select your operating mode by pressing the Mapping Mode, Recovery Mode, or Training Mode buttons on the Touch Screen.

8.6 STARTING AND STOPPING THE OUTPUT CURRENT

In all modes, the buttons can be pressed on the touch screen to activate the particular setting. When a setting is “live,” or able to be changed, there will be an orange border around the box, and turning dial will increase or decrease the value in whatever box is highlighted with the orange border. Turning the dial clockwise increases the value, and turning it counterclockwise decreases the value.

OPTIONAL: Setting the Timer.

The device has an optional timer. The device can be started without the timer, in “free-running” mode, where it will continue to run until it is manually powered off. If user desires to run the device for a certain period of time, the timer can be set before running the current. If the timer is set, it will start counting down as soon as the current is initiated. At the end of the timer, the device will beep, and it will automatically shut off the output power.

Here, the minute setting on the timer is being set to 3 minutes.

Here, the second setting on the timer is being set to 15 seconds, so the total timer will be 3m:15s. Once the output power is enabled, the timer will begin counting down. Once the time elapses, the output power will disable automatically.
OPTIONAL: Reversing the Direction of Current Flow. Occasionally, in various protocols, you may have reason to reverse the direction of current flow. To do that, press the POS button (At the bottom of each touch screen column, under “Polarity”). The button should switch from POS to NEG and turn from green to red.

MAPPING MODE

• Optionally, you can choose to set the timer if you’d like to use it.

• The output current can be initiated in three different ways. Output current is enabled by pressing either the Channel 1 & 2 Button (to operate those channels together, independent of 3 & 4), the Channel 3 & 4 Button (to operate those channels together, independent of 3 & 4), or the Sync button (to operate 1, 2, 3, & 4 all together).

• Increase the power to the desired level by turning the dial.

• When ready to turn off the output current, there are two options. Either (1) press down on the dial until it clicks, or (2) press whichever button (Channel 1 & 2, Channel 3 & 4, or Sync) was used to turn on the output current.

In this photo, here is an example of the device being operated, in Mapping Mode, with Channels 1 & 2 activated. Observe that the Intensity box in the left column is activated, as evidenced by the orange border. The orange border means that setting is “live,” and the dial will adjust that setting up or down. Also, Channels 1 & 2 are actively outputting current, because the Channel 1 & 2 Button is light green, while Channels 3 & 4 are not actively outputting current and the Button is dark green.
RECOVERY MODE:

- If using Ch 1 and 2 as a group, set the Frequency and Duty Cycle in the left column. If using Ch 3 and 4 as a group, set the Frequency and Duty Cycle in the right column. If using both groups together, set the left column and those settings will apply to both groups. Optionally, you can also choose to set the timer if you’d like to use it.

- The output current can be initiated in three different ways. Output current is enabled by pressing either the Channel 1 & 2 Button (to operate those channels together, independent of 3 & 4), the Channel 3 & 4 Button (to operate those channels together, independent of 3 & 4), or the Sync button (to operate 1, 2, 3, & 4 all together).

- Increase the power to the desired level.

- When ready to turn off the output current, there are two options. Either (1) press down on the dial until it clicks, or (2) press whichever button (Channel 1 & 2, Channel 3 & 4, or Sync) was used to turn on the output current.

In this photo, here is an example of the device being operated, in Mapping Mode, with Channels 1 & 2 activated. Observe that the Intensity box in the left column is activated, as evidenced by the orange border. The orange border means that setting is “live,” and the dial will adjust that setting up or down. Also, Channels 1 & 2 are actively outputting current, because the Channel 1 & 2 Button is light green, while Channels 3 & 4 are not actively outputting current and the Button is dark green.
TRAINING MODE:

- If using Ch 1 and 2 as a group, set the Frequency and Duty Cycle in the left column. If using only Ch 3 and 4 as a group, set the Frequency and Duty Cycle in the right column. If using both groups together, set the left column and those settings will apply to both groups. Optionally, you can also choose to set the timer if you’d like to use it.

- The output current can be initiated in three different ways. Output current is enabled by pressing either the Channel 1 & 2 Button (to operate those channels together, independent of 3 & 4), the Channel 3 & 4 Button (to operate those channels together, independent of 3 & 4), or the Sync button (to operate 1, 2, 3, & 4 all together).

- Increase the power to the desired level.

- When ready to turn off the output current, there are two options. Either (1) press down on the dial until it clicks, or (2) press whichever button (Channel 1 & 2, Channel 3 & 4, or Sync) was used to turn on the output current.

- Additional Settings: Work Time and Rest Time

**Work Time** = The time interval during which the active wave form will be on during every cycle. The Work time can be adjusted from 1-20s in increments of 1s.

**Rest Time** = The time interval during which the active wave form will be off during every cycle. Because the output current is a dual wave (having both the “active” and “background” wave forms), during the Rest Time the “active” wave form is off and the “background” is still being emitted. Though it may feel as if the signal is off, this “background” wave form will still be emitted (as long as the Output Power is not zero).

In this picture, the output is set to Work Time = 10s and Rest Time = 2s. That means the “active” wave form will be on for 10 seconds, during which time the output channel buttons will turn light green. Then, after that 10 seconds, the “active” wave form will turn off for 2s, during which time the associated channel buttons will turn dark green.
## Troubleshooting

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<td>Weak stimulation or no stimulation, even at high intensity setting</td>
<td>Poor electrode contact</td>
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<td></td>
<td>Electrode unplugged</td>
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<td>Uncomfortable/unusual sensation, as if stinging or burning the skin</td>
<td>Electrode worn out</td>
<td>Replace Electrode</td>
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<td>Electrode not flush against the skin</td>
<td>Press down on skin, or use an elastic wrap to</td>
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<tr>
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<td>hold it down</td>
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10. MAINTENANCE

10.1 CLEANING
- Clean the device with a damp cloth from time to time. But be careful not to get the device wet.
- For routine cleaning of the electrode cables use soap and water. Thoroughly dry after cleaning.

10.2 STORAGE
- Keep the device properly covered, when not in use. This will help keep out of dust.
- Make special space to keep the device, after the treatment is over.
- Do not store the device in a damp area. Dampness may affect device and cause rust.

10.3 ELECTRODES CABLES
- Do not pull out cables.
- For routine cleaning of the electrode cables use soap and water and thoroughly dry them after cleaning.
- Electrode wires should be kept loosely wound or breakage may occur.

10.4 REUSABLE ELECTRODES
- There are many kinds of electrodes. Use only the electrodes supplied with the device.
- After using any of these electrodes, grasp the corner of the electrode and gently remove it from your skin.
- Do not pull on the electrode snap or wire connection. Store the electrode in a resealable pouch or plastic bag.
- To prolong the life span of the electrodes, moisten them by applying a few drops of tap water. Apply the water with your fingertip.

10.5 SKIN CARE
- Apply electrodes on clean, dry and unbroken skin only.
- Always wash the selected treatment area with mild soap and water and dry it thoroughly before applying electrodes and after removing them.
- Do not stretch the skin or electrodes while applying or removing the electrodes.
- When removing electrodes, always peel back in the direction of the hair growth. If there is difficulty moisten the edges underside of the electrode.
- Applying unflavored Milk of Magnesia over electrode placement sites after removing electrodes helps maintain the natural pH of the skin and reduces irritation.
- If perspiration occurs in the area of the electrodes causing the electrodes to slide out of position, wipe area with unscented anti-perspiration pads and dry before reapplying electrodes.
- If skin irritation arises and persists from the use of electrical stimulation and certain type of electrodes, discontinue their use immediately and consult your clinician.
11. WARRANTY

This product warranty extends to the original consumer/purchaser of the product.

WARRANTY COVERAGE

This product is warranted to be free from defects in materials and workmanship for a period of one (1) year. This warranty ceases if the product has been damaged by accident, in shipment, unreasonable use, misuse, neglect, improper service, repair by unauthorized personnel or cause not arising out of defect in materials or workmanship. This warranty does not extend to any units which are used in violation of the guidelines set forth in this manual, or to units which have been altered or modified, or to damage to products or parts which have had the serial number removed, altered or defaced or rendered illegible.

WARRANTY DISCLAIMERS

This warranty is in lieu of all warranties expressed or implied and no representative or person is authorized to assume for manufacturer any other liable in connection with the sale of our products. There shall be no claims for defects or failure of performance or product failure/any theory of tort, contract or commercial law including, but not limited in negligence, gross negligence, and strict liability, breach of warranty and breach of contract. Some states do not allow the exclusion or limitation of implied warranties or consequential damages, so the above limitations may not apply to you. Manufacturer is not responsible or liable for indirect special or consequential damages arising out of or in connection with the use/performance of the product or other damage with respect to loss of property or loss revenues or profit.

LEGAL REMEDIES

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

WARRANTY PERFORMANCE

During the above one-year warranty period, a product with a defect will be repaired or replaced with a reconditioned comparable unit at distributor’s option when the product is returned to the distributor. The repaired or replacement product will be in warranty for the balance of the one-year warranty period and an additional one month period. No charge will be made for such repair or replacement.

CUSTOMER SERVICE

For in warranty service for a product covered under the warranty period, no charge is made for service and return postage. Please return the product insured, packed with sufficient protection, postage insurance, prepaid to the address. Customer’s duty/brokerage fee, if any, must be paid by the consumer.
OUT OF WARRANTY SERVICE

There will be charges rendered for repairs made to the product after the expiration of the one (1) year warranty period, after purchaser is advised appropriately. The distributor cannot assume responsibility for loss or damage during shipment. For your protection, carefully pack the product for shipment and insure it with the carrier. Ensure that you return the unit and accessories related to your problem and also that you indicate full return address. Also send a copy of sales receipt or other proof of purchase to determine warranty status. C.O.D. shipments cannot be accepted.

Model....................... S. No............... Date....................
Dealer’s Name.................................................................
Address............................................................................
Customer’s Name.............................................................
Address............................................................................

Dealer’s Signature

Customer’s Signature

Please send above warranty information and in the case if replacement of any accessory is needed to following address:

JOHARI DIGITAL HEALTHCARE LTD.
G-582-584, EPIP, BORANADA, JODHPUR 342001 RAJ. INDIA
Tel : 0291-3091100   |   Email : info@joharidigital.com   |   www.joharidigital.com