

8. Batteries:

Any 9V battery may be used with this unit because TENS units will drain the energy from ordinary disposable batteries rather quickly, NiCad rechargeable batteries may be significantly more economical to use.

PRECAUTION:

The effectiveness of TENS use is dependent on patient selection.

CARE AND MAINTENANCE

1. When not in use, the unit should be stored in its case to protect it from external damage.
2. Make sure the electrode and the skin are both clean.
3. Press the electrode onto the skin firmly to assure complete surface contact. Any separation between the electrode and the skin will produce a tingling that can be uncomfortable.
4. When removing the electrode, pull GENTLY on the electrode.
5. Do not apply an electrode over broken skin as this may produce discomfort.
6. When applying an electrode, do not allow the skin or the electrode to be stretched. This will assure a good fit.
7. Remove the battery of the unit dry at all times. A damp cloth and mild soap can be used for wiping the unit on occasion. Do not use harsh cleansing agents on any part of the unit.

PRECAUTION:

Improper application of electrodes or of selecting settings may cause electrode burns.

■ ***USING ELECTRODES:***

Some electrodes require gels, others have the gel already covering the surface of the electrodes. Whatever electrode are used, comfort may best be maintained if the following suggestions are taken:

1. Before applying or removing electrodes, it is important to turn OFF the Amplitude Control Knobs.
2. Insert the lead wire into the electrode. Read carefully the instructions that come with whatever electrodes are selected for use.
3. Place the electrode onto the skin over the desired nerve fiber area. Note: If the slightest edge or corner of an electrode is not firmly applied to the skin, a tingling may occur at that spot and cause discomfort. Be sure the entire electrode is firmly in place.
4. Insert the other end of the wire lead into the Channel Output Receptacle.
5. You are not ready to use the unit.

● **Suggestions:**

Never remove an electrode while the unit is in the ON position. This may cause the tingling discomforts.

Never remove either end of a wire lead by pulling on the wire. The electrical wire inside is very delicate, and it may break if stretched. Remove either end by pulling only on connector at the end of the wire lead.

PRECAUTION:

Isolated cases of skin irritation may occur at the site of electrode placement following long term application.

TROUBLE SHOOTING

A new battery and the indicator lights are the keys to trouble shooting:

1. Begin with the Channel Amplitude knobs turned off.
 - a. If there is any light blinking or glowing, there is a defect. Do not use the unit without correcting the problem.
 - b. If there is any stimulation felt, there likewise is a defect.

2. Turn on one channel. Set the Time Control to the “C” setting. Set the Amplitude to 5.
 - a. The yellow light should glow. If it blinks or stays unlit, there is a defect.
 - b. Set the Frequency below 50Hz and the Mode to Burst. The red light should blink. If the red light glows or stays unlit, there is a defect.
 - c. Set the Frequency above 50Hz and the Mode on Normal (First test) or on Modulation (Second test). The red light should glow. If the red light blinks or stays unlit, there is a problem.

3. In 2(b) or 2(c) above, stimulation should be felt. If not, switch the lead wires. If there still is no stimulation, either there is a defect or BOTH lead wires are broken. If stimulation is felt but it is very weak, replace the battery. Any time the red light should glow or blink be sure the battery is not getting weak.

TECHNICAL SPECIFICATION

Channels:	Two
Power Source:	One 9V disposable battery, or One 9V rechargeable NiCad battery
Wave Form:	Rectangular, constant current alternating biphasic with “0” net DC component
Pulse Frequency:	Variable, 2-150Hz
Pulse Width:	Variable, 60-250 μ sec
Charge per Pulse:	80mA X 250 μ sec: 20uC, 500 ohm test load
Maximum Current:	80mA

Modes:	Variations of the following:	
	1. Normal Mode:	Adjustable pulse width and frequency, with constant repetition of pulses.
	2. Pulse burst Mode:	2 bursts per second, 8 +/- 1 pulses per burst, with 100Hz intraburst rate. Only the pulse width remains adjustable.
	3. Modulation Mode:	Contains a gradual pulse rise time and fall time, cycling on 4 seconds, with adjustable pulse width and frequency. Power Indicator Lights: Lit when in use Output Indicator Light: Lit at channel outlet being use

* All value have +/- 20% tolerance.