# ADVANCED 4 CHANNEL TENS THERAPY



SUPERPRO40C

## **INSTRUCTION MANUAL**

#### Sun Medisys Inc.

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### SUN MEDISYS INC.







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Welcome to the Sun Medisys Family.

Thank you for trusting Sun Medisys Inc. and considering us.

CONGRATULATIONS for purchasing our next generation Digital or LCD unit.

We understand what it takes to get this, and certainly there must have been lots of planning and research involved before the purchase.

SunMedisys Inc., an independent family run business, started its operation way back in 2000.

With great integrity, high ethical values, stringent quality control, backed up by highly motivated employee force with tremendous efforts and disciplined activity business; we are a registered ISO 9001:2015 manufacturer.

We reassure you that what you have chosen is right.

Thanks

For Sun Medisys Inc.



#### INTRODUCTION

Congratulations on purchasing our next-generation ADVANCED TENS Therapy Unit, designed to suit almost every clinical application to provide effective management for most of the musculoskeletal painful/inflammatory conditions including degenerative pathologies.

The unit comprises of digital pulses generator with versatile parameter settings suitable for almost every clinical application, its integrated digital cut-off timer adds to the precision and convenience of treatments. This unit is suitable for both stationary clinical and mobile purposes. The unit comes with all necessary accessories for therapeutic application. Its userfriendly features are so set that they offer the best of the treatment parameters in its class. The unit comes with our traditional assurance of quality and safety standards.

### SALIENT FEATURES

- Four independent output channels with indicators.
- 0-80 mA pulse Amplitude on each channel.
- 99 Minutes timer which can be varied within the interface.
- Audio buzzer at end of treatment & for safety output control.
- Lightweight for Portability.
- Various Frequencies and Modes to choose from to meet the desired needs.

#### INDICATIONS

Indications for low frequency stimulator include the following:

Arthritic Pain

Denervation

- Sciatica
- Muscle Stimulation

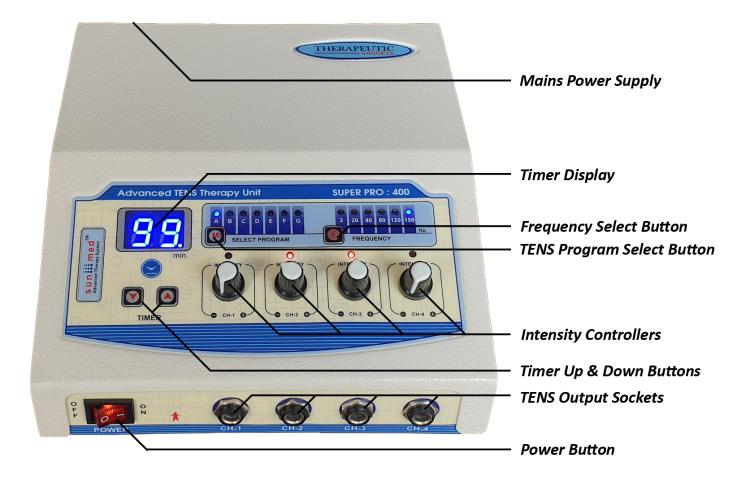
- Neurotic Pain
- Increased Blood Flow
  Degenerative Joints
- Reduction Of Edema Atrophy
  - Placebo
- Healing and Repair
- Edema
- SDC and other testings
  Paralysis



#### **QUICK START GUIDE**

- 1. Position the unit in a safe and convenient manner and fix the suitable electrode on to the treatment area.
- 2. Connect the mains cord to source and switch the power to 'ON' position.
- 3. Select the output pulse mode using 'M' button.
- 4. Set the frequency using 'F' button.
- 5. Select Treatment time by pressing +/- keys.
- 6. Press start to commence the treatment.
- 7. Gradually increase the intensity to the prescribed / desired level.
- 8. After the completion of set treatment time, the unit will automatically bring the intensity to ZERO along with a audio buzzer.
- 9. Put the intensity knob to the ZERO.
- 10.Switch the power 'OFF'.
- 11. Remove the electrodes and save them safety.

In case the treatment needs to be terminated before the prescribed time press 'stop' button.





### **DESCRIPTION OF SWITCHES**

The unit comes with user friendly features that ensure precise parameters setting and maximum therapeutic benefits. The control panel of the unit is equipped with:

- 1. Mains Socket On back panel of the Unit. It connects the unit to mains supply.
- 2. Mains Switch On back panel of the Unit. Makes and breaks mains connection to the unit. This switch also functions as circuit breaker in case of overload.
- 3. Digital Display Indicaties modes, parameters of output and treatment time left.
- 4. Frequency & Mode Selection Select the output mode by pressing up & Down keys.
- 5. Intensity Control It raises the output from 0 to maximum intensity i.e. 0-80 mAmp.
- 6. Timer Keys Set treatment time( Default 15.00 min.) to set Automatic shut-off power after the set time between 0-60 minutes.
- 7. Audio Buzzer Alarms completion of treatment time.

#### **METHOD OF APPLICATION**

- 1. Inspect the skin for the presence of any cut, wound rashes or any skin diseases, if so treatment shall not be given on that particular area.
- 2. Clean the skin with tissue paper or cotton, preferably wet cotton.
- 3. Position the patient in such a way that the application area is well visualized and a patient can sit or lay down during the treatment. The ease of patient is of utmost importance.
- 4. Bring the machine near the patient.
- 5. Place a good quantity of coupling medium on the area to be treated.
- 6. Activate the machine and set the timer and intensity after placing the electrodes on the skin of the patient.
- 7. Check that the electrodes are placed correctly and tied properly

Remember the electrodes should be in good contact with the skin and a sufficient quantity of coupling medium should be there. If it is needed to put more coupling medium. Switch the machine OFF, pour the coupling medium and then turn on the machine.

- **TREATMENT TIME:** There is no hard or fast rule for the treatment time and number to 10 minutes (depending on the area to be treated) for 5 days from the treatment plan. As the pain reduces, the dose or time can be reduced. Later on, treatment can be given on alternate days and then stopped. High intensity should not be used.
- **COUPLING MEDIUM:** To make a fire contact between the skin of the patient and electrodes: jelly or olive oil or liquid paraffin is used. These are called coupling medium or coupling agents.



A coupling medium should have the following properties:

- Gel-like viscosity for ease of use
- Non-allergic

Chemically inert

• Transparent

• Inexpensive

#### PRECAUTIONS

- The Unit must grounded during application.
- Do not use this unit near to other high frequency/electromagnetic device.
- If there is abnormal skin sensation, electrodes should be positioned in a site other than that area to ensure effctive stimulation.
- For patients who have febrile conditions, the outcome of the first treatment should be monitored.
- Patients who have epilepsy, advanced cardiovascular conditions or cardiac arrhythmias should be treated at the discretion physiotherapist in consultation with the appropriate medical practitioner.
- Only the supplied / recommended accessory must be used with unit.
- Do not apply this unit in conditions of pregnancy.
- Keep the electrodes separate during the treatment

#### Special Note:

- Dermatological conditions e.g. dermatitis, broken skin
- Danger of hemorrhage or current tissue bleeding (e.g. recent soft tissue injury)
- Avoid active epiphyseal regions in children

#### CONTRADICTIONS

Treatment should not be carried out on the following patients:

- 1. Patients who do not comprehend the physiotherapist's instructions or are unable to cooperate should not be treated.
- 2. Patients who are taking anticoagulation therapy or have a history of pulmonary embolism or deep vein thrombosis should not be treated with the vacuum electrode applications.
- 3. Similarly, Patients whose skin may be easily damaged or bruised or is-chemic/anesthetic.
- 4. Applications over :
  - The trunk or pelvis during pregnancy
  - Active or suspected malignancy
  - The eyes
  - The anterior aspect of the neck



- The carotid sinuses (stimulation in this area may cause a drop in blood pressure)
- Patients with pacemakers

#### **STANDARD ACCESSORIES**

This TENS unit will be supplied with the following

accessories:

1.	Rubber electrodes (Round)	08 Nos.
2.	Electrode's Lead	04 Nos.
3.	Velcro Fixation straps	02 set
4.	Mains Lead	01 No.
5.	User's Manual	01 No.
6.	Extra fuse	01 No.

(available with in the AC Socket)

#### **TECHNICAL SPECIFICATIONS**

Power Source	90 to 240 v AC 50/60Hz, SMPS supply
No. of Channel	Four independent output
Waveform	Bi-phasic Rectangular Balanced Wave
No. of Programs	6 (A, B, C, D, E, F)
Pulse Frequency	2Hz, 20Hz, 40Hz, 80Hz, 120Hz, 150Hz
Pulse Amplitude	0 - 80 mA/Channel
Pulse Width	150 us(except PWM-C, PWM-I mode)
Timer	0 - 60 min
Dimentions	23 x 24 x 7.5 (L X B X H)(cm.)
Weight	2.0 Kg./Unit

#### MAINTENANCE

There is very little maintenance required for the UST 1&3. If the ON/OFF switch lamp is not glowing steadily when the switch is put on, the problem could be due to blown fuse. To replace a burnt out fuse, remove it from the fuse holder and replace it only with a 1A/250V Fuse. DISCONNECT THE POWER TO THE INSTRUMENT BEFORE REMOVING THE FUSE FROM THE HOLDER.

There are no other user serviceable parts inside the instrument. Refer all problems to the nearest dealer or write to us at our email: sunmedisys@gmail.com, you can Also Visit us and write your query at sunmedisys.com



#### WARNING

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- Before using the equipments, the user should read carefully the instructions contained in this manual.
- Before treating a patient, the user should familiarize himself with the operating modes and have clear knowledge of indications & contraindications for the use of apparatus.
- Please insure this manual is readily available at all times to the personnel authorized to use the apparatus.
- For safety purpose, the power cord has been fitted with an earthed plug.
- ONLY USE AN EARTHED POWER SUPPLY SOCKET.
- The unit must be connected to approved power supply system.
- Do not use the apparatus close to SWD or MWD devices, may cause instability in output and functioning in program.
- Never leave the patient unattended during the treatment.
- The apparatus may not be used in so called "wet rooms" (hydro therapy rooms).
- SunMedisys will not be responsible for Therapy Effects resulting from an improper use of the apparatus.

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WARRANTEE CERTIFICATE

Customer Name:		
Address:		
Equipment Name:		
Serial No.:		
Warranty Form:	То	

- The Instrument is warrantee by the manufacturer for one year from The date of purchase and during this period, the defective parts shall be replaced or repaired, free of charges, If it is due to faulty material or workmenship, subject to the following Terms and Conditions.
- The Instrument should be used properly in accordance with the instructions as given in the instruction manual.
- The warranty does not cover the Instrument attended by others excepting our authorised service centre / dealer.
- Replacement of parts made of Rubber Electrodes, Laser Probe, Laser Diode, enclosure and carry bag are not covered within this Warranty.
- The cost incurred bringing the machine to our dealers premises or service centre and back are to borne by the customer.
- The Warranty does not cover the Instrument operated outside the range of stipulated Electric Supply i.e. below 198 volts and above 242 Volts.
- The decision of the manufacturer is final in all cases of warranty claims.

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