# IF-5000

# **COMBO** STIMULATOR



FOUR CHANNEL MUSCLE & INTERFERENTIAL STIMULATOR

**INSTRUCTION MANUAL** 





www.wecontrolpain.com (800) 588-8383

Johan Digital Learthcare Ltd.

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# **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 definition of these symbols are as follows;



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.



Text with a "WARNING" indicator will explain possible Safety infractions that will potentially cause serious injury and equipment damage.

**NOTE**:- Throughout this manual "NOTE" may be found. These Notes are helpful information to aid in the particular area of function being described.

# **⚠** CAUTION

- Read, understand and practice the precautionary an operating instructions. Know the limitations and hazards associated with using any electrical stimulation device. Observe the precautionary and operational decals placed on the unit.
- DO NOT operate the unit in an environment of short-wave diathermy use.
- DO NOT use sharp objects such as a pencil point or ballpoint pen to operate the buttons on the control panel as damage may result.
- This unit should be operated, transported and stored in temperatures between 59°F and 104° (15° C and 40°C), with Relative Humidity ranging from 30%-60%.

# **A WARNING**

- This device should be kept out of the reach of children.
- Care must be taken when operating this equipment around other equipment. Potential electromagnetic or other interference could occur to this or to the other equipment. Try to minimize this interference by not using other equipment in conjunction with it.

# **ELECTROTHERAPY**

# Combo Stimulator IF-5000

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# **TERMINOLOGY**

IFT	Interferential Current
IFC	Interferential Current
EMS	Electrical Muscle Stimulation Current
СОМВО	Combination Therapy
LOW	Low Frequency range in Interferential
WDE	Wide Frequency range in Interferential
HI	High Frequency range in Interferential
FIX	Standing Frequency range in Interferential
CVL	Conventional mode in EMS Mode
BST	Burst mode in EMS Mode
RSN	Russian mode in EMS Mode
WDTH	Pulse width in EMS & COMBO Mode
FREQ	Pulse frequency in Interferential, EMS & Combo Mode
CONT	Contraction Time in EMS & Combo Mode
RELX	Relaxation Time in EMS & Combo Mode
RAMP	Ramp up & down period in EMS & Combo Mode
CT	Compliance Timer
CN	Compliance Number
Min	Time in Minutes (Treatment & Sequencing Time)
S	Time in Seconds
Hz	Hertz: Unit of Frequency
μs	Microseconds: Unit of pulse width
Seq	Sequencing Time in Combo Mode.

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Combo Stimulator IF-5000

# 1. INSTRUCTIONS FOR USER OF ELECTROTHERAPY

Please read this operating manual carefully before using Combo Stimulator IF-5000 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 IF-5000 in a general manner. You should be particularly familiar with the prescription information and precautions before proceedings.

**CAUTION:** USA Federal law restricts these devices to sale by, or on order of a physician or licensed practitioner. This device should be used only under the continued supervision of a physician or licensed practitioner.

**CAUTION:** Hazardous electrical output. This equipment is for the use only by qualified medical personnel.

#### 1.1 INDICATIONS FOR USE

Combo Stimulator provides combination of desired stimulating currents, which can be chosen by clinicians for the following treatment therapies:

- ☐ Interferential Current Stimulation is used for symptomatic relief and management of chronic and/or as an adjunctive treatment in the management of post-surgical and post-traumatic acute pain problems.
- ☐ Electrical Muscle Stimulation (Russian) is indicated for:
  - Relaxation of Muscle spasm.
  - Prevention or Retardation of disuse atrophy.
  - Increasing local blood circulation.
  - Muscle re-education.
  - Immediate post-surgical stimulation of calf muscles to prevent venous thrombosis.
  - Maintaining or increasing range of motion.

#### 1.2 CONTRAINDICATIONS

- ☐ Stimulation is contraindicated for patients using cardiac pacemakers. It shouldn't be used on patients with known myocardial arrhythmia without physician evaluation.
- ☐ Stimulation should not be applied transthoracically in any mode.

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	Stimulation should not be applied transcerebrally.	
	Stimulation should not be applied over the carotid sinus	
	nerves, particularly on a patient with a known sensitivity to carotid sinus reflex.	
	Stimulation should not be applied over swollen, infected, or inflamed areas or skin eruptions, e.g. phlebitis, thrombophlebitis, varicose veins, etc.	
	Stimulation should not be applied over or in proximity to, cancerous regions.	
1.3 WARNINGS 🛕		
	For external use only.	
	Safety of stimulation during pregnancy or delivery has not been yet established.	
	Do not stimulate the eye area.	
	This therapy is ineffective for pain of central origin.	
	Interferential stimulation is of no curative value.	
	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 is a symptomatic treatment and as such suppresses the sensation of pain, which would otherwise serve as a protective mechanism.	
	Powered electrical stimulators should be kept out of the reach of children.	
1.4	PRECAUTIONS	
	Caution should be used for patients with suspected or diagnosed heart problems and epilepsy.	
	Some patients may experience skin irritation or hypersensitivity due to the electrical stimulation or electrical conductive medium.	

- ☐ Electrode placement and stimulation settings should be based on the guidance of the prescribing practitioner.
- Powered electrical stimulators should be used only with the leads and electrodes recommended for use by the manufacturer.

#### 1.5 ADVERSE REACTIONS

☐ Skin irritation and burns under the electrodes may cause possible allergic skin reaction to tape or gel.

#### 2. INTRODUCTION

Combo Stimulator IF-5000 is a Microcomputer Controlled Digital four-channeled unit through two outputs. It is designed to provide Muscle Stimulation & Interferential Stimulation current waveforms to treat painful muscles. The unit can be programmed to provide either of the waveform using either of the output. Combo stimulation can be selected to provide interferential for certain time in one output followed by Muscle Stimulation in the other output.

Depending upon the mentioned patient's indications, the unit IF-5000 delivers.

# A Muscle Stimulation (EMS or Russian)

Muscle Stimulation of motor fibers will generate pulsatile contraction of muscle group. IF-5000 can be programmed to provide desired Muscle Stimulation with selectable mode or Russian 2500 Hz. frequency stimulation.

#### **B** Interferential Stimulation (IFC/IFT)

The use of Interferential stimulation in acute and chronic pain conditions can relieve these pain symptoms. However, it is important to realize that only the pain symptoms are relieved and the underlying conditions is not affected or cured.

#### What is Interferential?

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Combo Stimulator IF-5000 generates medium frequency currents of 5000 Hz. When two such currents of slight different frequencies (5001 and 5250 Hz.), cross over each other, a third frequency current (1-250) of greater intensity is created in the deeper tissue known as True Interferential. Carrier frequency of 5000 Hz. penetrates deeper into the tissues. The unit IF-5000 can be programmed to select interferential stimulation of desired frequency. Clinician can select any sweep or fixed beat frequency. Again the treatment time can also be selected.

### C Combo Stimulation (OPTIONAL)

It is the unique feature incorporated in the design. Combo Stimulation integrates Interferential and EMS sequence for desired time to enhance combined effect where associated pains limit the activity of muscles or when clinician wants to treat the body with muscle stimulation and together with Interferential stimulation to relieve pains simultaneously.

The unit, beautifully designed with the Membrane Panel, provides easy touch entry for treatment selection. This instrument is attractive and fitted in an ABS body enclosure. It is strong, sturdy and can be carried along.

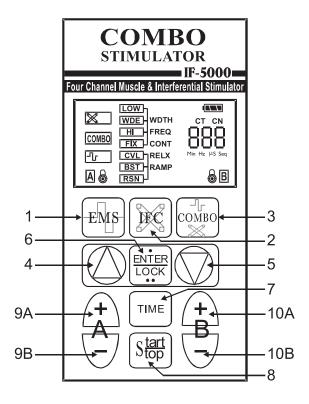
Combo Stimulator IF-5000 is portable and works on rechargeable battery back up, so the treatment will not be limited to site near AC outlet. Further, it makes the unit much SAFER.

#### 2.1 CONDITIONS THAT EFFECT USE

The user needs electric outlet for charging the batteries. The batteries should be fully charged. The unit should not be used in wet environment. Electrodes should be in firm contact with the body.

# 3. CONTROL & FUNCTIONS

[FRONT VIEW]



#### **KEYS & FUNCTIONS:**

#### 1. EMS

Key to select any of the following EMS mode for Muscle Stimulation

#### A. CONVENTIONAL (CVL) -

- □ Selectable Pulse width (WDTH) 50 to 400 microseconds, in step of 50 microseconds, using ∆ and ∇ Key.
- □ Selectable Pulse frequency (FREQ) from 1 to 150 Hz. in step of 1 Hz. using  $\Delta$  and  $\nabla$  Key.
- □ Selectable Contraction Time (CONT) 1 to 30 Seconds in step of 1 Seconds, using  $\Delta$  and  $\nabla$  Key.
- Selectable Relaxation Time (RELX) 0 to 30 Seconds in step of 1 Seconds, using ∆ and ∇ Key.
- Selectable Ramp Up & Down Period (RAMP) 1 to 9 Seconds in step of 1 Seconds, using ∆ and ∇ Key.

#### B. BURST (BST) - Burst of 7 pulses

- $\hfill \Box$  Selectable Pulse width (WDTH) 50 to 400 microseconds, in step of 50 microseconds, using  $\Delta$  and  $\nabla$  Key.
- Selectable Pulse frequency (FREQ) from 1 to 150 Hz. in step of 1 Hz., using ∆ and ∇ Key.
- □ Selectable Contraction Time (CONT) 1 to 30 Seconds in step of 1 Seconds, using ∆ and ∇ Key.
- □ Selectable Relaxation Time (RELX) 0 to 30 Seconds in step of 1 Seconds, using Δ and ∇ Key.
- □ Selectable Ramp Up & Down Period (RAMP) 1 to 9 Seconds in step of 1 Seconds, using Δ and ∇ Key.

# C. RUSSIAN (RSN) -

Premodulated Russian frequency of 50 Hz. (carrier frequency 2500 Hz.) Two Pole application.

- □ Selectable Contraction Time (CONT) 1 to 30 Seconds in step of 1 Seconds, using ∆ and ∇ Key.
- □ Selectable Relaxation Time (RELX) 0 to 30 Seconds in step of 1 Seconds, using ∆ and ∇ Key.

□ Selectable Ramp Up & Down Period (RAMP) 1 to 9 Seconds in step of 1 Seconds, using  $\Delta$  and  $\nabla$  Key.

# 2. IFC (INTERFERENTIAL STIMULATION)

Key to select any of the following IFT Mode for Interferential Stimulation with Inbuilt Vector 100% - 0% and then from 0% - 100% in Vector period of 44 Seconds

- A. LOW (LOW) Preset Sweep Frequency of 1 to 10 bps. (beats per second)
- B. WIDE (WDE) Preset Sweep Frequency of 1 to 250 bps. (beats per second)
- C. HIGH (HI) Preset Sweep Frequency of 80 to 150 bps. (beats per second)
- D. FIXED (FIX) Selectable Standing Frequency 10 to 200 bps in step of 10 using  $\Delta$  and  $\nabla$  keys.

#### 3. COMBO

Key to select Combo Stimulation, which is the sequencing of IFT and EMS in selected time duration. With this selection, further programming of IFT and EMS is required separately.

#### 4&5 INCREMENT (△) / DECREMENT (▽)

Keys to increase and decrease the selected values.

#### 6. ENTER/LOCK

Key to ENTER the selections when pressed once.

Pressing this Key once, then Hold down this key 5 to 6 seconds will Lock the parameters.

#### 7. TIME

Key to select the Treatment Time.

#### 8. START/STOP

Key to start and stop the power of both the outputs.

#### 9A POWER INCREMENT

Key to increase the Intensity of output A.

#### 9B POWER DECREMENT

Key to decrease the Intensity of output A.

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#### 9B CANCEL PREVIOUS SELECTION

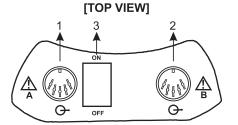
Key to cancel previous selection while programming.

#### **10A POWER INCREMENT**

Key to increase the Intensity of output B.

#### 10B POWER DECREMENT

Key to decrease Intensity of output B.

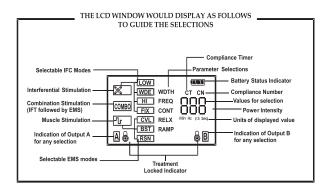


#### 1.& 2. OUTPUT JACKS - A & B

The unit is supplied with two 4 pole lead wires, which are inserted into these output sockets.

#### 3. ROCKER SWITCH

Turn the unit ON and OFF.



#### 4. DESCRIPTION

"Combo Stimulator IF-5000" is a Portable Neuromuscular Electrical Stimulation System, consists of programmable controller. Combo IF-5000 allows the treatment specifically tailored to the precise needs of the patient in the clinic and for subsequent treatment off site. The clinicians can set the treatment parameters and lock it, so patient can repeatedly use the unit at home, as prescribed by the clinician. The stimulation is most comfortable and the waveforms are unique.

It has been the clinician requirement many times when they wanted to treat the painful muscle condition by a unit that can perform interferential stimulation followed by muscle stimulation. Usually they have to turn the unit On and Off for different stimulation waveforms. The unique feature of Combo Stimulator IF-5000 is that the clinicians can set the desired Interferential stimulation as well as desired Muscle stimulation just by pressing one key.

The touch key operation and LCD protocols makes the use and programming easy and simple. All the parameters remain in the system control except the amplitude & time, which can be set by the patient himself. The ergonomic design and specially designed carry bag make this unit very comfortable to worn and carry.

#### FEATURES: -

- a) IF-5000 uses rechargeable battery system, which make it much more safe and effective.
- b) Micro controller based design and digital display guide through the programming.
- c) It is ABS molded beautiful unit with user friendly MKB
- d) The clinicians can check the number of treatments taken and the total treatment time, by the patient (Compliance Time & Number)

# **ELECTROTHERAPY**

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#### 5. ACCESSORIES

Combo Stimulator IF-5000 comes complete with all the necessary components to perform Pain Relief & Electrical Stimulation. The list of the items included is given below:

1.	Combo Stimulator IF-5000	01
2.	Electrode Cables (4 pole)	02
3.	Electrodes	80
4.	Operating Manual, includes warranty card	01
5.	Compliance of Treatment Time & Number Card (for clinicians only)	01
6.	Carry Bag	01

# Combo Stimulator IF-5000

#### 6. TECHNICAL SPECIFICATION

Number of Outputs Two Number of Channels Four

Stimulation types Muscle Stimulation (EMS)

including Russian, Interferential,

Sequencing (Combo)

EMS  $I_{\Gamma}$ 

□ Conventional:

Pulse width : 50 to 400 microseconds (Selectable)

Pulse rate : 1 to 150 Hz. (Selectable )

☐ Burst: 7 Pulses.

Pulse width : 50 to 400 microseconds

Pulse rate : 1 to 150 Hz.

☐ Russian - 2500 Hz.

Premodulated frequency: 50 Hz) Two Pole application.

Ramp Up / Down 1 to 9 seconds(±1 Second)

Contraction Time 1 to 30 seconds (±2 Seconds)

Relaxation Time 0 to 30 seconds (± 2 Seconds)

IFC - 5000 Hz.

Wave Form : Sine Wave (In-built Vector Stimulation 100%

- 0% and then from 0% to 100% in period of

44 Seconds)

Frequency:

 $\Box$  **LOW** Sweep 1 (± 4) to 10 (± 4) Hz.

 $\begin{tabular}{lll} $\blacksquare$ & HIGH & Sweep & 80 (\pm 25) to 150 (\pm 50) Hz. \end{tabular}$ 

 $\Box$  WIDE Sweep 1 (±25) to 250 (±50) Hz.

☐ **FIXED** Selectable beat frequency 10, 20, 30,.....200 Hz (± 10% or ±5Hz)

# **ELECTROTHERAPY**

# Combo Stimulator IF-5000

Treatment Time 1 to 60 minutes ( $\pm$  5%) Combo Sequencing Time 1 to 30 minutes ( $\pm$  5%)

Combination Option Yes (IFT + EMS)

Power Source 4 X 1.2V Ni-Mh,

Rechargeable batteries.

Output Voltage(± 10%) 50 Volts peak to peak.

On 500 Ohms load.

Output Current.(± 10%) 100 mA peak to peak on

500 ohms load

Special Feature Compliance Timer : Logs the Total

Treatment Time the unit has provided. The unit of logging is 10 minutes i.e. If instrument is used between 1-10 min. the unit will be

one.

**Compliance Number :** Log the total number of Treatments taken from Instrument. (1 unit = 1 treatment)

**Lock Key**: Save the selected treatment parameters separately for

EMS, IFC/IFT & COMBO.

#### 7. HOW TO USE IF-5000

Avoid operating the IF-5000 adjacent to and simultaneously with operating short- wave devices, as it may be susceptible to interference originating from short-wave diathermy units.

Do not use sharp objects to operate the membrane panel switches. If the tough outer layer of the membrane is broken, moisture may leak into the switches resulting in switch failure.

#### PREPARING ELECTRODES

- Use only the leads and electrodes provided with the unit by manufacturer.
- We strongly encourage careful maintenance of the electrodes. This includes the lead wires as well as the pads. Worn cables and/or poor pads (or the wrong sized pads) can have a significant impact upon treatment results.
- Make sure that the entire surface of the electrode makes firm contact with the patient.
- Prepare 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.
- Reusable electrode should not be used longer than the time specified on the package. This could result in ineffective treatment or skin irritation.

#### **ELECTRODES PLACEMENT**

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.

- The points where electrodes are to be placed should be marked.
- The electrodes should be applied on the marked points.
- The electrode cables consist of two sets of wires, which indicate two channels. Red molded pins indicate the one terminal of channel where as the black molded pins indicate second terminal of channel.
- The placement of electrodes may be by the quadruple or bipolar and contact will ensure treatment comfort and efficiency.
- 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 be explained to immediately inform the therapist, of any unpleasant sensation or any other discomfort.
- Review precautions, contraindications and side effects/adverse reactions listed above.

#### **CHECK BATTERY**

By turning the device ON, the display will show Battery status together with blinking alphabets "A" and "B".

Display will show full charge



Display will show medium charge



Display will show low charge



Display will show no charge



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NOTE:- If battery is on NO charge, Buzzer beeps three times every minute (For Five minutes) to alert you.

#### INTRODUCTION TO TREATMENT

Select Output A & B for programming of IFT / EMS OR select output A to program and same will be repeated in Output B.

The output selected for COMBO would provide interferential stimulation first \* followed by muscle stimulation from the other output.\*\*

- \* (Pads should be placed crossing over the treatment area)
- \*\* (Pads should be placed along the muscle group)

In this case program IFT with desired sequence time and then program EMS with desired sequence time.

NOTE:- Please ensure that you use completely charged batteries. If the battery bar shows battery is low please switch OFF instrument and put it on charging.

#### **PROGRAMMING**

Switch ON the instrument by Rocker Switch.

Icons A will start flashing with battery Status.

Select the output that needs to be programmed by Enter Key. Simultaneously Icon EMS, IFT and COMBO will light up.

SELECT THE WAVEFORM and program.

EMS Muscle Stimulation (Part 'I')

IFC Interferential (Part 'II')

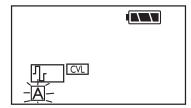
 COMBO IFC+EMS (Part 'III')

# **ELECTROTHERAPY**

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#### PART-I-EMS

Press EMS key: Icon EMS would glow with next selection of CVL.



Press EMS key again to select the desired mode.

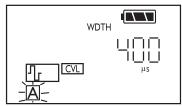
Press ENTER key and program as follows:

#### MODE: CONVENTIONAL (CVL)

#### Step 1:

Pulse WDTH preset at 400 µs will start flashing. Use  $\Delta$  or  $\nabla$  keys to select the desired pulse width.

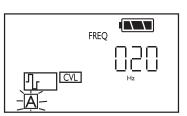
Press Enter key.



#### Step 2:

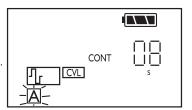
FREQ preset at 20 Hz will start flashing. Use  $\Delta$  or  $\nabla$  keys to select the desired frequency.

Press Enter key.



#### Step 3:

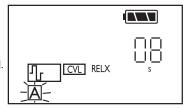
CONT preset at 8 S will start flashing. Use  $\Delta$  or  $\nabla$  keys to select the desired period. Press Enter Key.



# Combo Stimulator IF-5000

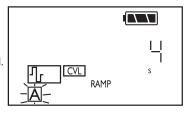
#### Step 4:

RELX preset at 08 S will start flashing. Use  $\Delta$  or  $\nabla$  keys to select the desired period. Press Enter Key.



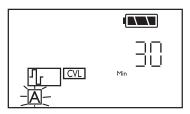
# Step 5:

RAMP preset at 4 S will start flashing. Use  $\Delta$  or  $\nabla$  keys to select the desired period. Press Enter Key.



# Step 6:

Time preset at 30 Min will start flashing. Use  $\Delta$  or  $\nabla$  keys to select the desired time. Press Enter Key.



# MODE: BURST (BST)

In case of Burst mode select as given in Steps 1, 2, 3, 4, 5 and 6 of Conventional Mode.

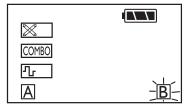
#### MODE: RUSSIAN (RSN)

In case of Russian Mode select as given in Steps 3, 4, 5 and 6 of Conventional Mode.

# **ELECTROTHERAPY**

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Selected output glows continuously to indicate that A is programmed. Now B will start flashing for programming.



**NOTE:** If you want to have different program for Output B follow the step 1 to 6 again.

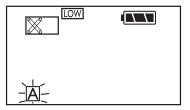
Otherwise Output B will be automatically programmed as Output A.

Go to the START TREATMENT and follow the instructions.

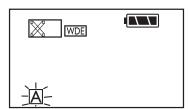
### PART- II - IFC

Press IFC key, IFT icon would glow continuously with icon LOW. Press IFC key again to select desired mode.

MODE: LOW (LOW)

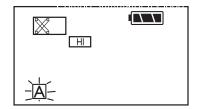


MODE: WIDE (WDE)



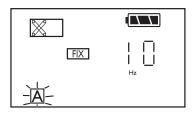
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MODE: HIGH (HI)

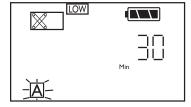


MODE: FIXED (FIX)

FREQ preset at 10 Hz will start flashing. Use  $\Delta$  and  $\nabla$  keys to select the desired beat frequency. Press Enter key.

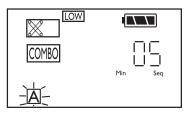


Select the desired treatment time. Press Enter Key..



PART- III - COMBO

Press COMBO key. Display will show COMBO for 2 seconds, followed by IFT with LOW (frequency range).



Set IFT parameters as Part-II-IFC in selected output.

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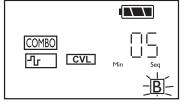
Once IFT is programmed Sequence time preset at 5 Min will start flashing.

Use  $\Delta$  or  $\nabla$  keys to select the Sequencing time.

Press Enter key.

Other output will start flashing for EMS programming.

Set EMS parameters as in Part- I-EMS.



Once EMS is programmed Sequence time preset at 5 Min will start flashing.

Use  $\Delta$  or  $\nabla$  keys to select the Sequencing time.

Press Enter key.

Select Treatment Time for COMBO.

#### START TREATMENT

After the unit is programmed A & B will glow.

Now start as follows:-

- 1. Insert the electrode cables into the output jacks.
- From this unit max. 4 sites using 2 pads can be treated with EMS. And two different sites using 4 pads can be treated with IFT.
- 3. Place the electrodes on desired body area and secure them to skin.
- 4. Press Start/Stop key.
  - The LCD display will show the selected parameters and treatment time.
- Increase the intensity by pressing increment keys (9 A & 10A) for output A and output B respectively till desired strength is felt.

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The LCD will display % power corresponding to output.

The intensity can be changed any time during the treatment.

LCD will continuously display the selected parameters and balance treatment time of output A followed by Output B.

In COMBO Mode the output is generated alternatively. The display will show output A with its selected parameter and balance time till its stimulation (Sequence Time). This will be followed by the selected parameters of output B till its stimulation.

The intensity can be changed for the output, which is displayed.

- During the relaxation period, only "RELX" will be displayed.
- 7. The power intensity cannot be changed during the relaxation period for the safety purposes.
- 8. When the treatment time is over, treatment will stop with
- 9. The unit will go back to Main Menu.
- Take off the electrodes & secure them on given glazed sheets.
- 11. Press the rocker switch to turn OFF the unit.

In order to stop the treatment at any time, press start/stop key, display will show A & B flashing for restart the programming.

#### LOCKING/UNLOCKING SYSTEM

Clinicians have the advantage of locking/storing parameters separately for the waveforms. EMS/IFC(IFT)/COMBO along with their different treatment times in output A & output B. User can change the treatment time even if instrument is locked but the changed treatment time will not be stored.

#### TO LOCK

Press Enter/Lock key once and then hold down it for 5 to 6 seconds after selecting the parameters & treatment time in Output A & B.

The lock icon will glow with the respective output A & B. Now the patient can take the (prescribed) treatment repeatedly by following steps (see start treatment).

#### TO UNLOCK

Press Enter/Lock key once and then hold down it for 5 to 6 seconds and release the ENTER/LOCK key.

The lock icon will disappear of both the outputs.

**RECHARGE THE BATTERY:** After the treatment is over please **DO NOT FORGET** to recharge the battery for the next treatment.



**CAUTION**: Improper batteries or improper installation of batteries may result in loss of performance, damage to the IF-5000 & injury to the user.

#### IMPORTANT

At any time if the power is felt too intense, lower down by pressing the Output Decrement  $\nabla$  Keys (9B&10B) for output A and output B respectively.

#### SPECIAL FEATURE

This unit has a unique feature to log the total treatment time and total number of treatment provided by this unit. The Clinicians will be given the key to log this separately with the manual.

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#### 8. MAINTENANCE

#### **CLEANING**

- ☐ The soiled unit should be cleaned with a damp cloth. Follow the care of electrodes as indicated on the package.
- ☐ For routine cleaning of the electrode cables use soap and water. Thoroughly dry after cleaning.

#### WARNING

- Do not pull out cables.
- ☐ Electrode wires should be kept loosely winded or breakage may occur.

#### STORAGE

- ☐ Keep the unit properly covered, when not in use. This will help to keep out of dust.
- Make special space to keep the unit, after the treatment is over.



**CAUTION**: Do not store the unit in a damp area. Dampness may affect device and cause rust.

#### **ELECTRODES CARE**

There are many kinds of electrodes. Use the electrodes recommended by your physician and obey the instructions attached to the electrodes.

#### Reusable Electrodes

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. Reapply the release liner to the adhesive side of the electrode. Store the electrode in a resealable pouch or plastic bag. To prolong the life span of electrodes, remoisten them by applying a few drops of tap water when they show signs of drying out or losing their adhesives. Apply the water with your fingertip.

# **ELECTROTHERAPY**

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After repeated usage, reusable electrodes begin to lose their adhesives and therefore deliver less stimulation and shorten battery life. Replace reusable electrodes as needed.

#### **Disposable Electrodes**

These electrodes use a solid polymer gel and come with a built-in tape patch. They can be worn while showering, but long soaks in hot baths will loosen them. When electrodes are not adhering well or fail to deliver proper stimulation, remove and replace them.

#### **BATTERY REPLACEMENT**

To Replace the Battery

- □ Switch OFF the unit by using rocker switch.
- □ Remove the cover of Battery compartment . This exposes the batteries for removal. Replace the batteries as per the polirity indicated.
- ☐ Close the cover of battery compartment properly.

#### SKIN CARE

- ☐ Apply electrodes on clean, dry and unbroken skin only.
- ☐ Before applying electrodes and after removing -always wash the site with mild soap and water. Then rinse and dry thoroughly.
- ☐ Excess body hair in the electrode placement site should be clipped and not shaved.
- ☐ If clinician recommends skin prep usage-follow instruction as directed.
- ☐ When applying electrodes, do not stretch skin or electrodes.
- ☐ When removing electrodes always peel back in direction of hair growth, or moisten edges or underside of electrode.
- ☐ Applying unflavored Milk of Magnesia over electrode placement sites after removing electrode helps maintain the natural pH of the skin and reduces irritation problems.

- ☐ If perspiration occurs in the area of the electrodes causing the electrodes to slide out of position, wipe area with unscented antiperspiration pads and allow drying before reapplying electrodes.
- ☐ If skin irritation arises and persists from the use of Electrical Muscle Stimulator and certain type of electrodes, discontinue usage immediately and consult your clinician.

#### 9. TROUBLE SHOOTING

If none of the displays are lighting up after pressing the rocker switch to "ON" position then -

- Return the rocker switch to "OFF" position.
- If the device still does not come ON, inform supplier.

Observation	Possible Causes	Remedy
Weak stimulation or No Stimulation even at max. Amplitude setting.	Poor electrode contact or Insufficient gel on the Electrode.	Check the electrodes or Supply sufficient gel
	Electrode conduction is Low Lead wire is worn out	Change electrodes. Change electrode wires.
Stimulation strong	Improper electrode placement	Check electrode Placement
Uncomfortable Stimulation or too Strong Stimulation	Amplitude too high	Reduce
Skin irritation at electrode Placement site	Improper contact/Gel dried up.	Wet or change the electrode
Sudden high intensity While increasing Amplitude	Increasing amplitude too fast	Increase amplitude slowly giving time to patient to his comfort.
Unit doesn't switch ON	Battery deeply discharged	Charge Battery for at least 2-3 hours

# **ELECTROTHERAPY**

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# 10. COMPLIANCE OF TREATMENT TIME & NUMBER (ONLY FOR CLINICIANS)

#### **COMPLIANCE TIMER: INFORMATION DISPLAYED**

- a. CN XXX: Number of time the "Start/Stop" key is processed. We will call it Compliance Number (shown as CN XXX).
- b. CT XXX: Total time instrument is used. We will call it Compliance Timer (Shown as CT XXX). 10 Minute of treatment time is equal to one unit. That is if display shows CT 010 it indicates that the total treatment taken from the instrument is 100 minute (10x10). Please do note that the compliance timer records value in multiples of 10 only.

NOTE:- Treatment for less than 10 minute will not be logged.

#### How to access the Compliance number and timer

- a. Please make sure that you are not taking treatment or Programming of any mode is in progress.
- b. Switch on the Instrument using the Rocker switch when A and B flashing.
- c. Press Time Key and keep it pressed.
- d. Press Start/Stop Key and keep it pressed.
- e. Release Time Key
- f. Release Start/Stop Key
- g. The display will show CT XXX indicating the unit of total treatment time for which the instrument has been used.
- After 2 seconds of delay the display will show CN XXX indicating that the total number of times the treatment has been started (for minimum 10 minutes).
- The display will continue to show the above messages for at least 5 times.

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How to Reset (Erase) the Compliance Timer & Compliance Number

- a. When message CN XXX or CT XXX are being displayed press Enter Key, keep it pressed for 3-4 seconds and release it.
- b. The display will show CT 000 followed by CN 000.
- c. Your compliance timer and number have been Reset

# **ELECTROTHERAPY**

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#### 11. WARRANTY

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

#### WARRANTY DURATION

This product is warranted to the original consumer for a period of (1) year from the original purchase date.

#### WARRANTY COVERAGE

This product is warranted against defective materials or workmanship. This warranty ceases if the product has been damaged by accident, in shipment, unreasonable use, misuse, neglect, improper service, commercial use, 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 furnished by manufacturer, or to units which have been altered or modified, or to damage to products or parts there of which have had the serial number removed, altered or defaced or rendered illegible. The warranty doesn't cover normal wear & tear or replacement of battery, elec. cord, electrodes & other accessories.

#### 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, 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 of revenues or profit.

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#### **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 distributors 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.

#### CONSUMER 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 aforesaid 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		
Consumer's Name		
Address		
Dealer's Signature		Customer's Signature

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