Problem Solving Through Innovation!

User Manual
Model 7570
D-HVP
Digital High Volt Portable Stimulator
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## Intelect® D-HVP Digital High Volt Portable Stimulator

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This manual has been written for the owners of the Intelect D-HVP Digital High Volt Portable Stimulator. It contains general information on the operation, precautionary practices and maintenance information. In order to maximize use, efficiency and the life of your system, please read this manual thoroughly and become familiar with the controls as well as the accessories before operating the system.

This manual contains general safety, operating, maintenance and care instructions for the owners and operators of the Intelect D-HVP Digital High Volt Portable Stimulator.

Specifications put forth in this manual were in effect at the time of publication. However, owing to Chattanooga Group’s policy of continual improvement, changes to these specifications may be made at any time without obligation on the part of Chattanooga Group.

Before administering any treatment to a patient, users of this equipment should read, understand and follow the information contained in this manual for each mode of treatment available, as well as the indications, contraindications, warnings and precautions. Consult other resources for additional information regarding the application of electrotherapy.

The effectiveness of electrical stimulation depends directly upon each patient carefully following the procedures and schedule set up by the physician or therapist.

Stay current with the latest clinical developments in the field of electrotherapy. Observe all applicable precautionary measures for treatment.

Keep informed on appropriate indications and contraindications for the use of electrotherapy.

This equipment is to be used and sold only under the prescription and supervision of a licensed practitioner.

**PRODUCT DESCRIPTION**

Intelect D-HVP Digital High Volt Portable Stimulator units are two channel electrotherapy stimulator systems with 29 programmable presets. This unit is capable of delivering 0-330 volts of electrotherapy in 5 volt increments over a continuous period of time. Additional accessories are shipped with the unit and can be installed by the end user.
ABOUT ELECTROTHERAPY  Intelect® D-HVP Digital High Volt Portable Stimulator

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:

⚠️=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.

⚠️=EXPLOSION HAZARD- Text with an “Explosion Hazard” indicator will explain possible safety infractions if this equipment is used in the presence of flammable anesthetics.

NOTE: Throughout this manual “NOTE” may be found. These Notes are helpful information to aid in the particular area or function being described.

⚠️=CAUTION- Read, understand and practice the precautionary operating instructions. Know the limitations and hazards associated with using any electrical stimulation device. Observe the precautionary and operational decals placed on the unit.

⚠️=CAUTION- DO NOT operate the Intelect D-HVP Digital High Volt Portable Stimulator when connected to any unit other than Chattanooga Group devices. DO NOT operate the unit in an environment of short-wave diathermy use.

⚠️=CAUTION- 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.

⚠️=CAUTION- This unit should be operated, transported and stored in temperatures between 59° F and 104° F (15° C and 40° C), with Relative Humidity ranging from 30%-60%.

⚠️=CAUTION- Inspect electrode cables and associated connectors before each use.

⚠️=CAUTION- The Intelect D-HVP Digital High Volt Portable Stimulator is not designed 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.

CAUTION

• Read, understand and practice the precautionary 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 Intelect D-HVP Digital High Volt Portable Stimulator when connected to any unit other than Chattanooga Group devices. 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° F (15° C and 40° C), with Relative Humidity ranging from 30%-60%.

• Inspect electrode cables and associated connectors before each use.

• The Intelect D-HVP Digital High Volt Portable Stimulator is not designed 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.
ABOUT ELECTROTHERAPY

PRECAUTIONARY INSTRUCTIONS (continued)

⚠️ CAUTION ⚠️

• This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to other devices in the vicinity. However, there is no guarantee that interference will not occur in a particular installation. Harmful interference to other devices can be determined by turning this equipment on and off, try to correct the interference using one or more of the following: Reorient or relocate the receiving device, increase the separation between the equipment, connect the equipment to an outlet on a different circuit from that to which the other device(s) are connected and/or consult the factory field service technician for help.

⚠️ WARNING ⚠️

• Federal law restricts this device to sale by, or on the order of, a physician or licensed practitioner. This device should be used only under the continued supervision of a physician or licensed practitioner.
• For continued protection against fire hazard, replace fuses only with ones of the same type and rating.
• 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.
• This device should be kept away from 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.

⚠️ WARNING ⚠️

• Before administering any treatment to a patient you should become acquainted with the operating procedures for each mode of treatment available, as well as the indications, contraindications, warnings, and precautions. Consult other resources for additional information regarding the application of electrotherapy.
• 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.
• Turn the power off before you attempt to apply or remove the electrodes.

⚠️ DANGER ⚠️

• Equipment not suitable for use in the presence of a flammable anesthetic mixture with air, with oxygen or nitrous oxide.
INDICATIONS & CONTRAINDICATIONS

Indications:
- Relaxation of muscle spasms.
- Prevention or retardation of disuse atrophy.
- Increasing local blood circulation.
- Muscle re-education.
- Maintaining or increasing range of motion.
- Immediate postsurgical stimulation of calf muscles to prevent venous thrombosis.

Contraindications & Warnings:
- Patients with cardiac demand pacemakers.
- The long term effects of chronic electrical stimulation are unknown.
- Keep out of the reach of children
- Safety has not been established for use during pregnancy
- Do not stimulate over the carotid sinus nerves.
- Should not be applied transthoracically.
- Should not be applied transcerebrally.
- Stimulation should not be applied over swollen, infected, or inflamed areas or skin eruptions (e.g., thrombophlebitis, varicose veins, etc.
- Stimulation should not be applied over, or in proximity to cancerous lesions.
NOMENCLATURE

Intelect® D-HVP Digital High Volt Portable Stimulator

- LCD (Liquid Crystal Display)
- Preset Indicator
- Electrode Port
- Electrode Lead Cable
- Rate (Frequency) Indicator
- Tab/Field Button
- Save Button
- On/Off Button
- AC Adapter Port
- HR:MIN (Remaining Time) Indicator
- Intensity Field
- Increase Button
- Pause Button
- Decrease Button
- Display Button
**NOMENCLATURE**

**FEATURES, FUNCTIONS, & FIELDS**

**LCD**
The LCD (Liquid Crystal Display) serves as the User Interface for the Intelect D-HVP. The LCD consists of two rows of eight characters each. The LCD displays the following:

- In the upper left corner, the preset being used displays.
- In the upper right corner, the time remaining in the therapy displays.
- In the lower left corner, the frequency of stimulation displays.
- In the lower right corner, the output voltage currently being used displays.
- In between the rows of characters, flashing bars indicate current is presently flowing.
- An asterisk (*) displays to indicate that another preset program will follow once the current therapy ends.
- A low battery indicator displays to the left of the preset.
- A pause indicator displays when therapy has been temporarily stopped.

**Preset Indicator**
This number indicates the current preset being used. When the batteries are low, the low battery icon flashes intermittently in this field.

**Electrode Port**
Plug the Electrode Cable into this socket, making sure to align the white arrow with the notch on the side of the unit.

**Electrode Lead Cable**
The Electrode Cable consists of the main plug that is connected to the unit, and 4 leads (2 black and 2 red) that connect to electrodes.

**Rate (Frequency) Indicator**
The number displayed in this field represents the number of pulses per second (pps) delivered to the patient by the Intelect D-HVP. The available range of frequency is 1 to 120 pps.

**Tab/Field Button**
Use this button to navigate to the Preset, Rate, HR:MIN, and Voltage fields.

**Save Button**
In Access mode, the Save Button is used to save parameter settings as Presets.
On/Off Button
Press the On/Off button to supply power to the unit and begin electrotherapy. The unit always powers up with a setting of 0 intensity. The On/Off button can be pressed at any time during electrotherapy to immediately stop the treatment and turn the unit off. If the On/Off button is pressed and held, the unit serial number displays on the LCD.

AC Adapter Port
This is where the AC Adapter is connected to the unit. Use this to prolong the life of the battery pack.

HR: MIN (Remaining Time Indicator)
This field displays the time that remains in the electrotherapy session. The electrotherapy time can be a minimum of 5 minutes, and a maximum of 8 hours, or you can set the electrotherapy time to continuous in 5 minute increments.

Intensity Field
This field indicates the amount of voltage the patient is receiving. The intensity is measured in volts and is controlled by the Increase and Decrease Buttons during electrotherapy.

Increase Button
Depending on the information displayed, the Increase Button may be used to increase, navigate through, or select the following:
- Preset number
- Pulse Rate (frequency)
- Electrotherapy time
- Voltage the patient receives
- Positive or negative polarity in the lead (red) wires
- Simultaneous or alternating modes of current in the electrodes

Most importantly, however, the Increase Button is used to increase the intensity of the stimulation during electrotherapy in 5 volt increments.

Pause Button
The Pause Button may be pressed at any time during electrotherapy to stop treatment. When the unit is paused, the Pause Indicator flashes intermittently next to the HR: MIN (remaining time indicator) field. The Pause Button can be pressed again to resume electrotherapy.
Decrease Button

Depending on the information displayed, the Decrease Button may be used to decrease, navigate through, or select the following:

- Preset number
- Pulse Rate (frequency)
- Electrotherapy time
- Voltage the patient receives
- Positive or negative polarity in the lead (red) wires
- Simultaneous or alternating modes of current in the electrodes

Most importantly, however, the Decrease Button is used to decrease the intensity of the stimulation during electrotherapy in 5 volt increments.

Display Button

The Display Button allows you to view the settings and parameters of the current preset. The Display Button also allows you access to the Preset modification area of the user interface where you can alter the parameters on existing presets, or create new ones. While programming presets, you may also use the Display Button to navigate through the screens.

Polarity Field (not shown)

The Polarity field can be accessed by pressing the Display Button once. This field displays either POS or NEG to indicate the polarity of the red leads in the current preset.

Mode Field (not shown)

The Mode field can be accessed by pressing the Display Button twice. This field displays either SIM or ALT to indicate either simultaneous or alternating current being delivered to the electrodes in the current preset.

Next Preset Field (not shown)

The Next Preset field can be accessed by pressing the Display Button three times. This field displays the preset that has been set up to follow the current preset.

Total HR (Time) Field (not shown)

The Total HR field can be accessed by pressing the Display Button four times. This field displays the total amount of time that has elapsed since the current electrotherapy session began.
NOMENCLATURE

ACCESSORIES

Self-Adhesive Electrodes (not shown)
The Intelect D-HVP Digital High Volt Portable Stimulator is shipped with a DURA-STICK™ High Volt Patient Kit for single patient use. Each kit contains one 5 x 8 inch (13 cm x 20 cm) self-adhesive dispersive pad, and two round self-adhesive electrodes.

Battery Pack (not shown)
The Battery Pack allows the Intelect D-HVP to be a fully self-contained, portable unit, and is designed to be easier to use than individual batteries. Insert the battery pack with the removal ribbon up so that you can remove and discard it when it is depleted. Because the battery pack consists of alkaline batteries, you can discard it in normal waste systems.

NOTE: The battery pack is not rechargeable. Discard it when it is completely depleted. Do not attempt to recharge the Battery Pack, and never mix rechargeable (nickel-cadmium) battery packs with alkaline battery packs. rechargeable batteries will not provide the proper amount of power to the unit.

If the battery pack supplied with your unit becomes depleted, discard it and replace it with 4 ‘AA’ batteries. During prolonged periods of storage, remove the battery pack or individual batteries to prevent possible damage caused by battery leakage or corrosion.

Carrying Case (not shown)
Use the carrying case to transport and store the Intelect D-HVP and its accessories.

AC Adapter (not shown)
For the patient’s convenience, and to prolong battery life, the Intelect D-HVP can be operated with the included AC Adapter.

Belt Clip (not shown)
The Belt Clip allows patients to attach the unit to their belt by fastening the clip over the top of their belt or pants. This allows for convenience and freedom of movement during electrotherapy. The Intelect D-HVP can be operated on a tabletop by folding out the belt clip and setting the unit on top of a table.
### UNIT & WAVEFORM SPECIFICATIONS

High volt stimulation has output ranges between 0 and 330 volts. True Twin-Peak High Volt is designed to deliver very short duration pulses, which are very low in pulse charge. High Volt is available on both channels.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WAVEFORM</strong></td>
<td></td>
</tr>
<tr>
<td>Output Mode</td>
<td>Electrode pads</td>
</tr>
<tr>
<td>Polarity</td>
<td>Positive or negative from active (red) lead</td>
</tr>
<tr>
<td>Pulse Intensity</td>
<td>0-330 volts in 5 volt increments</td>
</tr>
<tr>
<td>Pulse Spacing</td>
<td>100 µsec</td>
</tr>
<tr>
<td>Pulse Shape</td>
<td>Exponential spikes delivered in pairs</td>
</tr>
<tr>
<td>Pulse Duration</td>
<td>5 µsec per pulse @ 50% of pulse amplitude</td>
</tr>
<tr>
<td>Pulse Frequency</td>
<td>0-150 Hz in 1 Hz increments</td>
</tr>
<tr>
<td>Frequency Modulation</td>
<td>S-1 Modulates 1-120 over 40 seconds, S-2 Modulates 10-20 over 40 seconds, S-3 Modulates 80-120 over 40 seconds</td>
</tr>
<tr>
<td>Mode of Current Flow</td>
<td>Simultaneous or alternating, 7 second alternating with 2 second ramp up</td>
</tr>
<tr>
<td>Maximum Treatment Time</td>
<td>8 hrs or continuous flow</td>
</tr>
<tr>
<td>Available on Channels</td>
<td>1 and 2</td>
</tr>
</tbody>
</table>

### DIMENSIONS

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>5.2 in</td>
</tr>
<tr>
<td>Width</td>
<td>2.8 in</td>
</tr>
<tr>
<td>Depth (with Belt Clip)</td>
<td>1.75 in</td>
</tr>
</tbody>
</table>

### WEIGHT

<table>
<thead>
<tr>
<th>Weight</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Weight (with Battery Pack)</td>
<td>9.3 oz</td>
</tr>
<tr>
<td>Shipping Weight</td>
<td>3 lbs 2 oz</td>
</tr>
</tbody>
</table>

### POWER

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tolerances</td>
<td>+/- 10% into a 500 Ohm load impedance for each channel using the AC Adapter</td>
</tr>
<tr>
<td>Input</td>
<td>120 V AC 60 Hz 12.5 W</td>
</tr>
<tr>
<td>Output</td>
<td>6 V DC, 1200mA</td>
</tr>
<tr>
<td>Electrical Class</td>
<td>CLASS 1</td>
</tr>
</tbody>
</table>
OPERATION

Intelect® D-HVP Digital High Volt Portable Stimulator

CREATING PRESETS
There are 29 programmable presets available with the Intelect D-HVP. When shipped, however, there is only 1 preset available for viewing. For a list of the available selections for each parameter, see page 21.

ACCESSING AND CHANGING PARAMETERS
To access the parameters of the presets, do the following:

1. Press and hold the Display Button until a check-mark (✓) displays in the Preset field.

2. Release the Display Button as soon as the check-mark (✓) displays.

ACCESS MODE displays briefly on the LCD. Then, the parameters of the first preset display. If the unit has previously been used, you will see the parameters of the last preset used. You are now in the program mode and may alter and set new parameters. The Preset number will be flashing intermittently.
3. Press the Increase and Decrease Buttons to change the Preset number.

4. Press the Tab/Field Button to navigate to the Rate (frequency) field. The Rate (frequency) field will be flashing intermittently.
5. Press the Increase or Decrease Buttons to increase or decrease the rate. If you decrease the rate to 0, SLEEP will display in the voltage field.

**NOTE:** You may not edit the Intensity (voltage) field for any Preset. This field will always be controlled by the patient pressing the Increase and Decrease Buttons during electrotherapy.

6. Notice the “D” displayed next to the Preset field. This indicates that this particular preset can be viewed by the patient in Patient Therapy Mode. Press the Pause Button to delete the “D” and deny the patient access to this preset. Press the Pause Button again to make the “D” display and grant the patient access to this preset.
7. Press the Display Button to go to the next screen. The Polarity field will be flashing.

8. Press either the Increase or Decrease Buttons to change the polarity of the red (active) leads. Select NEG to make the polarity in the red leads negative. Select POS to make the red leads positive.
9. Press the Tab/Field Button.
The HR:MIN field will flash intermittently.

10. Press the Increase or Decrease Buttons to increase or decrease the amount of time (in 5 minute increments) the patient will receive electrotherapy.
CREATING PRESETS (continued)

11. Press the Tab/Field Button.
    The Mode field will flash intermittently.

12. Press either the Increase or Decrease Buttons to change the mode of the leads. Select SIM to make the leads deliver the electrotherapy to the patient simultaneously. Select ALT to alternate the electrotherapy between the leads.
13. Press Display to go to the next screen.
   The Next Preset field will flash intermittently.

14. Press either the Increase or Decrease Buttons to select the Preset you want to begin immediately following the preset you are currently programming.

   For example, if you are programming the parameters for Preset 1 and you would like to run Preset 5 when Preset 1 is complete, press either the Increase or Decrease Buttons to display 5 in this field.

   Instead of a preset, you may want the unit to power off once the current preset completes. If this is the case, press the Decrease Button until OFF displays in the Next Preset field.
15. Press the Display Button to go to the next screen. The Total HR field flashes intermittently.

16. Press the Decrease Button to reset the timer to 00:00.
CREATING PRESETS (continued)

17. Press the Save Button to save this preset.

SAVING DATA displays briefly on the LCD and you are returned to the first screen.

NOTE: If you do not press the Save Button, the preset’s parameters will revert back to the original settings when the unit is powered off.

RETURNING TO PATIENT THERAPY MODE

You must return to the Patient Therapy Mode in order to administer electrotherapy to the patient.

To return to Patient Therapy Mode after creating or changing presets, do the following:

1. Press and hold the Display Button until a check-mark (✓) displays in the Preset field.
2. Release the Display Button as soon as the check-mark (✔) displays. PATIENT MODE displays on the LCD. You may now administer electrotherapy.
**OPERATION**

Intelect® D-HVP Digital High Volt Portable Stimulator

**CREATING PRESETS (continued)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Selection</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>1-120 pps</td>
<td>The frequency can be set from 1 (minimum) to 120 (maximum) pulses per second.</td>
</tr>
<tr>
<td></td>
<td>S-1</td>
<td>The frequency is modulated from 1 to 120 pps over a period of 40 seconds.</td>
</tr>
<tr>
<td></td>
<td>S-2</td>
<td>The frequency is modulated from 10 to 20 pps over a period of 40 seconds.</td>
</tr>
<tr>
<td></td>
<td>S-3</td>
<td>The frequency is modulated from 80 to 120 pps over a period of 40 seconds.</td>
</tr>
<tr>
<td></td>
<td>00</td>
<td>This will cause the LCD to display SLEEP in the Voltage field during electrotherapy. There will be no stimulation felt by the patient, but the timer continues to run. This setting can be used to set a rest period between therapy sessions.</td>
</tr>
<tr>
<td>Mode</td>
<td>SIM</td>
<td>Both active (red) electrodes stimulate the patient at the same time.</td>
</tr>
<tr>
<td></td>
<td>ALT</td>
<td>Stimulation is alternated between the active (red) electrodes every 7 seconds. There is a 2 second ramp up period for each electrode.</td>
</tr>
<tr>
<td>Polarity</td>
<td>NEG</td>
<td>This sets the active (red) leads to be negative.</td>
</tr>
<tr>
<td></td>
<td>POS</td>
<td>This sets the active (red) leads to be positive.</td>
</tr>
<tr>
<td>Time</td>
<td>5 min (minimum) to 8 hrs (maximum)</td>
<td>5 minutes to 8 hours in 5 minute increments.</td>
</tr>
<tr>
<td></td>
<td>CONT</td>
<td>Increasing the time past 8 hours will set the electrotherapy time to continuous flow.</td>
</tr>
<tr>
<td>NEXT PRST</td>
<td>Preset 2 to Preset 29</td>
<td>This will determine the preset that will run when the current preset is completed. The unit will cycle continuously through the selected preset. To end the current electrotherapy session, set the next preset to NEXT PRST OFF. This setting will ensure that the current session will finish and the unit will power off.</td>
</tr>
<tr>
<td>TOTAL HR</td>
<td>Timer</td>
<td>This is your timer. Pressing the Decrease Button will reset the timer to 00:00.</td>
</tr>
</tbody>
</table>
## Creating Presets (continued)

<table>
<thead>
<tr>
<th>Preset Number</th>
<th>Rate (pps)</th>
<th>Mode</th>
<th>Polarity</th>
<th>HR:MIN</th>
<th>Next Preset</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>120</td>
<td>SIM</td>
<td>NEG</td>
<td>30 minutes</td>
<td>OFF</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>SIM</td>
<td>NEG</td>
<td>30 minutes</td>
<td>OFF</td>
</tr>
<tr>
<td>3</td>
<td>120</td>
<td>SIM</td>
<td>NEG</td>
<td>30 minutes</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>120</td>
<td>SIM</td>
<td>NEG</td>
<td>30 minutes</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>20</td>
<td>SIM</td>
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<td>NEG</td>
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<td>30 minutes</td>
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<td>NEG</td>
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<td>120</td>
<td>SIM</td>
<td>NEG</td>
<td>30 minutes</td>
<td>OFF</td>
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RESTORING MANUFACTURER DEFAULTS
To remove any custom preset parameters you might have set, and to return all Preset parameters to the original factory settings, do the following:

1. Press and hold the Display Button until a check-mark (✓) displays in the Preset field.

2. While holding the Display Button, press the Save Button four times. RESET IN PROGRESS will briefly display on the LCD and the unit will power off. All manufacturer defaults are restored.
PREPARING THE SKIN FOR ELECTROTHERAPY

Before applying the electrodes, you must first prepare the patient’s skin for electrotherapy. By properly preparing the patient’s skin for electrotherapy, you will

- Allow more electrical stimulation to reach the targeted nerves
- Prolong the life of your electrodes
- Reduce the risk of skin irritation

**NOTE:** To reduce the risk of skin irritation, observe the instructions in this section before each electrotherapy session. However, if skin irritation develops, remove the electrodes, discontinue use of the Intelect D-HVP, and consult a physician.

To prepare the patient’s skin for electrotherapy, do the following:

1. Thoroughly wash the skin on which you intend to place the electrodes with mild soap and water.
PREPARING THE SKIN FOR ELECTROTHERAPY (continued)

2. Dry the skin thoroughly.

3. Using a pair of scissors, trim excess body hair from the skin on which you intend to place the electrodes. Be careful not to cut or break the skin.

NOTE: Never shave the area on which you intend to apply electrotherapy.
STARTING, STOPPING, AND INTERRUPTING THERAPY

Before beginning an electrotherapy session, make certain you have followed the procedures outlined in “Preparing the Skin” on pages 24-25.

To administer electrotherapy using the Intelect D-HVP, do the following:

1. Connect the lead cables to the self-adhesive electrodes.
   
   **NOTE:** Do not use unnecessary force to connect the electrodes to the lead wires.

2. Place the self adhesive electrodes on the sites prescribed by a qualified practitioner. Make sure you press them firmly on the patient’s skin to ensure good conductivity.
STARTING, STOPPING, AND INTERRUPTING ELECTROTHERAPY (continued)

3. Insert the Electrode Cable into the Electrode Port on the side of the unit.

4. Press the On/Off Button to turn on the power to the unit.

5. Press the Tab/Field Button so that the Preset field is flashing intermittently.
6. Press either the Increase or Decrease Button to select a Preset.

7. When you have selected a Preset, press the Tab/Field Button until the Intensity field flashes intermittently.

8. Increase the intensity to the level prescribed by a qualified practitioner by pressing the Increase Button.

NOTE: You may interrupt electrotherapy at any time by pressing the Pause Button.
9. If you are using a Preset, the unit will automatically power off once the programmed time elapses. If you are not using a Preset, press the Decrease Button until 00V displays in the Intensity field.

10. When you are finished administering electrotherapy, disconnect the Electrode Cable and self-adhesive electrodes and properly store them for the next treatment.
USING THE AC ADAPTER

The Intelect D-HVP can be used with either the battery pack or AC Adapter, and can be switched during electrotherapy. You are not required to remove the batteries prior to using the AC Adapter.

You should switch to the AC Adapter when the Low Battery Indicator begins to flash on the LCD (in the Preset Indicator field). Once the Low Battery Indicator icon displays, you have from 30 minutes to 2 hours remaining, depending on your parameter settings.

**NOTE:** Use only the AC Adapter provided with the unit. Use of any other electrical adapter may cause damage to the Intelect D-HVP.

To switch from the battery pack to AC power during electrotherapy, do the following:

1. Connect the power supply cord (male end) to a properly grounded electrical outlet.

   Read and follow the Warnings, Cautions, and Dangers in the front of this manual.

2. Press the Pause Button.

   The Pause indicator displays on the LCD.
3. Connect the AC Adapter to the AC Adapter port.

   **NOTE:** The AC Adapter will not charge the batteries in this unit.

4. Press the Pause button again to resume electrotherapy.

5. If the battery pack is depleted, replace it as soon as possible.
MAINTENANCE

CLEANING
After each use, clean the unit using a soft cloth dampened with water and mild soap. Never immerse the unit, AC Adapter, or batteries in any fluid. This could cause damage to the internal electronics. Avoid using cleaning fluids or solvents to remove stains or dirt. Such liquids may damage the casing of the unit.

SERVICE
Should the Intelect D-HVP Digital High Volt Portable Stimulator unit require service, contact the selling dealer or Chattanooga Group Service Department. All returned units to the factory for service must include the following:

WARRANTY REPAIR/OUT OF WARRANTY REPAIR
1. Written statement containing the following information;
   - RGA Number- Obtain from Factory
   - Unit Model Number
   - Unit Serial Number
   - Contact person with Phone and Fax Numbers
   - Billing Address (for Out of Warranty Repair)
   - Shipping Address (Where to Ship Unit after Repair)
   - Detailed Description of Problem or Symptoms
2. Copy of original invoice issued at purchase of the unit.
3. Ship unit to Factory in the original container with all accessories and information as required in item one above to:

   Chattanooga Group
   4717 Adams Road
   Hixson, TN 37343
   Telephone (toll free): 1-866-864-0598
   Telephone (direct): 1-423-870-2281
   FAX: 1-423-870-7407
   Web Address: www.chattgroup.com

Service to these units should be performed only by Service Technicians Certified by Chattanooga Group.
WARRANTY

Chattanooga Group ("Company") warrants that the Intelect® D-HVP Digital High Volt Portable Stimulator unit ("Product") is free of defects in material and workmanship. This warranty shall remain in effect for three years (36 months) from the date of original consumer purchase. If this Product fails to function during the three years warranty period due to a defect in material or workmanship, Company or the selling dealer will repair or replace this Product without charge within a period of thirty (30) days from the date on which the Product is returned to the Company or the dealer.

All repairs to the Product must be performed by a service center certified by the Company. Any modifications or repairs performed by unauthorized centers or groups will void this warranty.

The warranty period for accessories is 90 days. Accessories consist of AC Adapter, Battery Pack, Electrode Cable, Electrodes, Carrying Case, and Belt Clip.

To participate in warranty coverage, this Product’s warranty registration card (included with Product) must be filled out and returned to the Company by the original owner within ten (10) business days of purchase.

This Warranty Does Not Cover:

Replacement parts or labor furnished by anyone other than the Company, the selling dealer or a certified Company service technician.

Defects or damage caused by labor furnished by someone other than Company, the selling dealer or a certified Company service technician.

Any malfunction or failure in the Product caused by product misuse, including, but not limited to, the failure to provide reasonable and necessary maintenance or any use that is inconsistent with the Product User’s Manual.

COMPANY SHALL NOT BE LIABLE IN ANY EVENT FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

To Obtain Service From Company or the selling dealer under this warranty:

1. A written claim must be made within the warranty period to the Company or the selling dealer. Written claims made to the Company should be sent to:

   4717 Adams Road
   Hixson, TN 37343
   Telephone (toll free): 1-866-864-0598
   Telephone (direct): 1-423-870-2281
   FAX: 1-423-870-7407

   and

2. The Product must be returned to the Company or the selling dealer by the owner.

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

The Company does not authorize any person or representative to create for it any other obligation or liability in connection with the sale of the Product. Any representation or agreement not contained in the warranty shall be void and of no effect.

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
More Trusted Products from Chattanooga Group

Achiever™
- Supports
- Treatment Tables

A.E.R.® Boot and Compression System
- Auto Edema Reduction Boot

Baseline® Measurement Instruments
- Dynamometers, Goniometers, etc.

boo-boo pac™
- Child Size Bear-Shaped Cold Pack

Cambion®
- Shock Dampening Foot Care Products

Carpal-Trac™
- Carpal Traction Accessory

Cervical Traction System
- Clinical Cervical Traction

Chattanooga Exerciser™
- Exercise Equipment

CoPac®
- Chilling Units and Reusable Cold Therapy Products

Conductor® Gel
- Highly Conductive Ultrasound Gel

Contracture Products
- Contracture Management Orthotic Products

CTS®
- Carpal Tunnel Stretching Device

DURA-STICK® Electrodes
- Self-Adhesive Electrodes

EMG Retrainer® & EMG Retrainer® IR
- Dual Channel Surface EMG

Flexi-PAC®
- Reusable Hot and Cold Compresses

Fluidotherapy®
- Dry Heat Therapy Units

Forte™ CPS
- Electrotherapy and Ultrasound

Gel Medex™
- Gel Mattress Overlay

Hydrocollator®
- Heating Units and HotPacs™

Intelect® Legend
- Ultrasound and Electrotherapy Products

Magneciser™
- Exercise Equipment

Myossage®
- Massage Lotion

Nylatex®
- Elastic Wraps

OptiFlex® and OptiFlex® S
- Continuous Passive Motion

Opti-Ice®
- Cold Therapy System

Para-Care®
- Paraffin Wax Unit and Accessories

Pillow Perfect®
- Cervical Pillow Line

Pivotal Therapy System™
- Orthotics for the Spine

ProPower Pillow™
- Power Massage Pillow

PressSion®
- Intermittent Compression

Pron Pillo®
- Positioning Pillow

QuikWrap™
- Deluxe Universal Belt System

SensaFlex™
- Hot and Cold Compress

SPORT-PAC™
- Soccer Ball Shaped Cold Pack

Theratherm®
- Self-Drying Heat Pack

Therma-Wrap®
- Hot and Cold Compression

Triton™
- Treatment and Traction Equipment

Tru-Trac™
- Traction Equipment

TX™
- Treatment and Traction Equipment

Vectra™ Series
- Electrotherapy and Ultrasound

Versa Bath Seat™
- Aid to Daily Living

Wellness 1st™
- Back Support

Women’s Contour Back Support
- Back Support

ISO 13485 Certified
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