# AMPCARE ES™ Powered Muscle Stimulator

## **User Manual**



This page intentionally left blank

### TABLE OF CONTENTS

1.	Foreword	2
2.	Product Description	2
3.	General Safety	3-4
4.	Indications for Use, Intended Uses	5
5.	Contraindications	5
6.	Warnings	6
7.	Precautions	6-7
8.	Adverse Reactions	7
9.	Nomenclature	8-10
10.	Specifications	11-14
11.	Markings and Labels	15
12.	Set Up	16-17
13.	Operating Directions for Use	18-19
14.	Programming Directions for Use	20-23
15.	Accessories	24-25
16.	Training Program	26
17.	Maintenance	26
18.	Warranty	26-27
19.	Ordering supplies	28

### User Manual for the AMPCARE ES™

Thank you for purchasing the AMPCARE ES™.

### 1. Foreword

Read this User Manual carefully before you start using your AMPCARE  $ES^{TM}$ . This manual has been written for the users of the AMPCARE  $ES^{TM}$ . It contains general safety information on the operation, precautionary practices and care information. In order to maximize use, efficiency and the life of the system, please read this manual thoroughly and become familiar with the controls, as well as the accessories before operating this system.

Before administering any treatment to a patient, the users of this equipment should read, understand and follow the information contained in this manual for the mode of treatment available, as well as the indications, contraindications, warnings, precautions and adverse reactions.

### 2. Product Description

The AMPCARE ES<sup>™</sup> is a portable two-channel electrotherapy unit used in treating single or multiple patients with oral-pharyngeal dysfunctions (dysphagia) and disorders of the head and neck.

Stay current with the latest clinical developments in the field of AMPCARE ESP<sup>™</sup> (Effective Swallowing Protocol) Therapy System and observe all applicable precautionary measures for treatment.

Federal Law restricts this device to sale by or on the order of a physician or licensed practitioner.

This equipment is to be used only by a licensed practitioner certified in the use of AMPCARE ESP<sup>™</sup> Therapy System.

### 3. General Safety

- Read, understand, and practice the precautionary and 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 this unit in an environment where other devices are being used that intentionally radiate electromagnetic energy in an unshielded manner. Portable and mobile RF communications equipment can affect Medical Electrical Equipment.
- DO NOT use sharp objects such as a pencil point or ballpoint pen to operate the buttons on the control panel.
- This unit should be operated, transported and stored in temperatures between 40°F and 104°F and Relative Humidity between 10% and 80%.
- Make sure the unit output is turned off before connecting the lead wires to the unit prior to therapy or before removing electrodes from the skin after therapy.
- Place the patient in a comfortable position during AMPCARE ES™ therapy session.
- Do not submerge or otherwise immerse in liquids as the AMPCARE ES<sup>™</sup> 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.
- Inspect lead wires and associated connectors for signs of damage before each use. Replace damaged lead wires immediately with new before any treatment is applied.
- Always check the stimulation controls before treating a patient. The stimulation amplitude/intensity should always be adjusted gradually.

### 3. General Safety (continued)

- Care must be taken when operating this equipment adjacent to or stacked with other equipment. Potential electromagnetic or other interference could occur to this or other equipment. Try to minimize this interference by not using other equipment in conjunction with it. (i.e. cell phones, MRI, electro surgery, defibrillation, etc.)
- Electronic monitoring equipment (such as ECG monitors and ECG alarms) may not operate properly when electrical stimulation is in use.
- Before administering the AMPCARE ES<sup>™</sup> waveform 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, Electrical Stimulation, and AMPCARE ES<sup>™</sup>.
- Simultaneous connection of a patient to high frequency surgical equipment may result in burns at the site of the stimulator electrodes and possible damage to the stimulator.
- Keep electrodes separated during treatment. Electrodes in contact with each other could result in improper stimulation or skin burns.
- Electrodes should be inspected before each use for resistance (i.e. hydration level, tack, discoloration and impurities). Follow the manufacturing guidelines on electrode packaging.
- Patients with an implanted neurostimulation device must not be treated with AMPCARE ES<sup>™</sup> anywhere on their body. Energy from AMPCARE ES<sup>™</sup> can be transferred through the implanted neurostimulation system, can cause tissue damage, and can result in severe injury or death.
- Handle, clean and dispose of components and accessories that have come in contact with bodily fluids according to National, Local and Facility rules, regulations and procedures.
- Only use the AMPCARE E Series Electrodes and accessories designed specifically for use with the AMPCARE ES™ Unit.

### 4. Indications for Use and Intended Uses

#### Indications for Use for AMPCARE ES™

Muscle re-education by application of external stimulation to the muscles necessary for pharyngeal contraction.

#### Intended Uses for AMPCARE ES™

The waveform is a square symmetrical biphasic waveform with the application for use on the musculature of the face. The intended uses are for prevention or retardation of disuse atrophy, for muscle re-education and for relaxation of muscle spasms in the treatment of swallowing musculature dysfunction in post-traumatic conditions or after neurological insult with impaired neuromuscular function. The AMPCARE ES™ waveform is a symmetrical biphasic waveform with the application for use on the swallowing musculature in the anterior portion of the neck. The therapy treatment intended uses AMPCARE ES™ are: Muscle re-education of the swallowing musculature in the treatment of dysphagia (swallowing problems) from any etiology except mechanical causes that would need surgical intervention (for instance, obstructing tumors). Non-mechanical causes of dysphagia include: neurological and muscle disorders; cardiovascular accidents; respiratory disorders with swallowing complications; iatrogenic conditions (conditions caused by surgery); fibrosis/stenosis arising from radiation; disuse due to stroke, intubation hypoxic encephalopathy, or birth-related anoxic injuries; and trauma to the head and neck. This device is a prescription device intended for use by or on the order of a physician or other licensed health professional.

### 5. Contraindications

• This device should not be used on patients with cardiac demand pacemakers/defibrillators or other implanted electronic devices.

### 6. Warnings

- The long term effects of electrical stimulation are unknown.
- Stimulation should not be applied over the carotid sinus nerves, particularly in patients with a known sensitivity to the carotid sinus reflex.
- This device should not be used when cancerous lesions or infections are present in the treatment area.
- Stimulation should not be applied over places where active range of motion is contraindicated (e.g. fractures, anastomosis).
- Stimulation should not be applied transthorasically in that the induction of electrical current into the heart may cause cardiac arrhythmias.
- Stimulation should not be applied transcerebrally.

### 7. Precautions

- Safety of powered muscle stimulation for use during pregnancy has not been established.
- Caution should be used for patients with suspected or diagnosed heart problems.
- Caution should be used for patients with suspected or diagnosed epilepsy.
- Caution should be used in the presence of the following:
  - When there is a tendency to hemorrhage following acute trauma or fracture.
  - When individuals cannot give clear feedback. Patients may not indicate when current becomes uncomfortable.
  - Following recent surgical procedure when muscle contraction may disrupt the healing process.
  - Over a menstruating or pregnant uterus.
  - Over areas of the skin which lack normal sensation.

- Some patients may experience skin irritation or hypersensitivity due to the electrical stimulation or electrical conductive medium. The irritation can usually be reduced by using an alternative conductive medium or an alternative electrode placement.
- Electrode placement and stimulation settings should be based on the guidance of the prescribing practitioner.
- Powered muscle stimulators should be kept out of the reach of children.
- Powered muscle stimulators should be used only with the lead wires and electrodes recommended for use by the manufacturer.
- Portable powered muscle stimulators should not be used while driving, operating machinery, or during any activity in which involuntary muscle contractions may put the user at undue risk of injury.

### 8. Adverse Reactions

• Skin irritation and burns beneath the electrodes have been reported with the use of powered muscle stimulators.

### 9. Nomenclature



#### Keypad and case

- 1. Channels 1 and 2 Lead wires connect in the respective ports.
- 2. Operator LCD Panel see items 15-24.
- 3. **Power On/Off Button** used to turn unit On or Off.
- 4. **Program Button** used to select electrical stimulation program.
- 5. **Pause Button** used to pause the treatment.
- 6. Enter Button used to enter the selected parameter.
- Channel 1 Intensity Up and Down Controls used to increase or decrease Channel 1 intensity.
- 8. **Menu Up and Down Controls** used to modify selected parameters.
- 9. **Parameter Up and Down Controls** used to increase or decrease parameter increments.
- 10. Channel 2 Intensity Up and Down Controls used to increase or decrease Channel 2 intensity.
- 11. Control Button Cover used to maintain selected parameters.
- 12. LED Light Indicator blinks when unit is administering current.
- 13. Belt Clip attach to patient during therapy session.
- 14. **Battery Compartment** push in and slide down to insert/replace batteries. Do not use rechargeable batteries.

#### Liquid Crystal Display (LCD)



- **15.** Channel 1 Intensity Indicator shows the intensity of Channel 1 during therapy session.
- **16. Program Indicator (ESP1, ESP2, MANUAL)** shows the program selected.
- **17.** Channel 2 Intensity Indicator shows the intensity of Channel 2 during therapy session.
- **18. Preset or Manual Indicator –** shows if the frequency and phase duration are preset or manually selected.
- **19.** Synchronous Indicator shows that Channel 1 and 2 will work synchronously if both are in use.
- **20.** Duty Cycle Indicator shows the activation/on time and rest/off time of the duty cycle.
- 21. Timer Icon and Treatment Timer therapy session timer.
- 22. Waveform Indicator symmetrical biphasic waveform fixed.
- 23. Pulse Rate Indicator shows the frequency measured in Hertz.
- 24. Phase Duration Indicator shows the phase duration measured in microseconds.

### 10. Specifications

Please read the following detailed specifications carefully before using the unit.

**Output Configuration –** Dual channel electrically isolated with miniature safety connectors.

**Output Waveforms** – AC Mode: Rectangular symmetrical biphasic with zero net DC.

Intensity Control – Dual intensity potentiometers:

Ch1 intensity up/down 20 steps, 0 to a maximum of  $100mA^*$  into  $500\Omega$  Ch2 intensity up/down 20 steps, 0 to a maximum of  $100mA^*$  into  $500\Omega$ 

Unit Dimensions – width x height x depth is 66 x 136 x 30.7 mm

Standard Weight – 98 grams

Power Source –Two AA LR6 Alkaline Batteries

- Do not use rechargeable batteries

Safety Recognition – Meets IEC/EN 60601-1 and 60601-2

Waveform Specifications – is a symmetrical biphasic waveform.

Output Mode	electrodes
Output Intensity	0-100mA*
Channel Mode	Single and Co-Contraction
Phase Duration	50-250µsec
Mode Selection	Constant Charge
Set Intensity	Individual Channel Intensity Setting
Cycle Time	5/15, 5/20 and 5/25
Frequency	5-50 Hz
Ramp	1 sec
Treatment Time	5-30 minutes
Available on Channels	

\* Intensity setting controls output amperage, which is limited based on phase duration. Refer to page 14 of this manual for more detailed information.

#### Three mode features:

#### a) Program Preset 1, ESP 1 – electrical stimulation program 1

- /	· J · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
	Frequency	Fixed, 30 Hz
	Phase duration	Fixed, 50µs
	Waveform	Symmetrical biphasic rectangular
	On time	Fixed 5 sec
	Off time	Adjustable 25 sec, 20 sec and 15 sec
	Ramp up	Fixed 1 sec
	Ramp down	Fixed 0
	Treatment timer	Fixed 30 min
	Intensity	Adjustable 0 – 20*
b) Pr	ogram Preset 2, ESF	2 – electrical stimulation program 2
Frequency		Fixed, 30 Hz
	Phase duration	Fixed, 250µs
	Waveform	Symmetrical biphasic rectangular
	On time	Fixed 5 sec
	Off time	Adjustable 25 sec, 20 sec and 15 sec
	Ramp up	Fixed 1 sec
	Ramp down	Fixed 0
	Treatment timer	Fixed 30 min
	Intensity	Adjustable 0 – 20*

#### c) Program Manual 3, Manual 3 – electrical stimulation program 3

Adjustable 5-50 Hz
Adjustable 50-250µs
Symmetrical biphasic rectangular
Fixed 5 sec
Adjustable 25 sec, 20 sec and 15 sec
Fixed 1 sec
Fixed 0
Adjustable 5-30 min
Adjustable 0 – 20*

\* Intensity setting controls output amperage, which is limited based on phase duration. Refer to page 14 of this manual for more detailed information.

#### Output:

a. Waveform:

Symmetrical biphasic rectangular waveform



#### b. Output parameters:

Detailed output parameters of the 2 preset programs and 1 manual program regarding to the frequency, phase duration, ramp up, ramp down, cycle on time, cycle off time, and program duration are as follows.

#### Program table:

\*

Program	ESP1	ESP2	Manual 3	
Frequency (Hz)	30 (fixed)		5-50 adjustable in 1 Hz increments	
Phase Duration (µsec)	50 (fixed)	250 (fixed)	50-250 adjustable in 50 µsec increments	
Ramp Up (sec)	1 (fixed)			
Ramp Down (sec)	0 (fixed)			
Cycle ON Time (sec)	5 (fixed)			
Cycle OFF Time (sec)	Selectable values of 25, 20, or 15			
Program Duration (min)	30 (fixed)		5 – 30 adjustable in 5 min increments	
Intensity	0 – 20 adjusta		table in increments of 1*	

Intensity setting controls output amperage, which is limited based on phase duration. Refer to page 14 of this manual for more detailed information.

#### c. Intensity:

The intensity can be increased/decreased by adjusting the intensity setting from 0 to 20. The intensity setting controls the output amperage and is dependent on the phase duration. The maximum amperage output is achieved at 50µsec phase duration with intensity at 20. The minimum amperage output is achieved at 250µsec phase duration with intensity at 1 (excluding 0 for which no amperage is output.) The table below shows numerical values obtained during bench testing for four specific intensity settings at each of the five available phase durations. Also shown is a graphical representation of the same data showing the values obtained during bench testing at each intensity to the testing at each intensity to the testing at each of the same data showing the values obtained during bench testing at each of the same data showing the values obtained during bench testing at each intensity value for all five phase durations.

Intensity	50 µsec	100 µsec	150 µsec	200 µsec	250 µsec
5	30 mA	24 mA	20 mA	15 mA	16 mA
10	46 mA	36 mA	32 mA	30 mA	25 mA
15	68 mA	50 mA	42 mA	40 mA	35 mA
20	90 mA	66 mA	56 mA	50 mA	44 mA

Intensity Table: (bench-testing data: 30Hz, 500 ohms)



### 11. Markings and Labels

- 1. Ch 1 and Ch 2 output jacks Ch1 & Ch2 are both marked on the top of the unit with respect to the output channels.
  - After inserting the lead wire plugs into both Ch 1 and Ch 2 jacks, please do not remove the plugs when the unit is working. Ensure that the unit is switched OFF before removing the plugs.



2. Battery



These symbols, as marked in the battery compartment, indicate to use only the specified batteries: 2x1.5 Volt AA Alkaline (LR6). Do not use rechargeable batteries.  $\bigoplus$  and  $\bigoplus$  stand for Anode and Cathode respectively.

Please dispose of the device in accordance with the laws in your area. Your local council will be able to tell you where your nearest facility is. The collection facilities may send items for treatment, recovery and recycling, so by using them you'll help to save resources and minimize effects on the environment.

#### 3. Label



### 12. Set Up

#### How to assemble your AMPCARE ES™

#### STEP 1 BATTERY INSTALLATION:



Remove the battery cover and insert two batteries on top of fabric strap, as shown on the diagram inside the battery compartment. Replace the battery cover.



Note: Your unit will not function if the batteries are inserted incorrectly. To check, press the order button once and the LCD display will start up. After you have made this check, press the order button again and hold for 3 seconds to switch the unit off.

CAUTION: Replace with AA Alkaline 1.5 volt batteries (LR6). Do not use rechargeable batteries.

#### STEP 2 LEAD WIRE INSTALLATION:



Decide whether you wish to use the unit with one lead or two. Unravel one or both leads and insert the plug(s) into either of the jacks at the top of the unit. If only using one lead, insert into either the Ch1 or Ch2 jack as marked on the unit. At the end of the leads supplied with your unit, you will find red and black pin shields. These are the anode and cathode, respectively. The following general points are made for your information:

- 1. More sensation and stimulation tend to come from the black shield side (cathode).
- 2. Where applicable, place the black shield side over the weakest muscle belly; e. g. if using a submandibular placement on an individual with right hemiplegia, consider placing the black shield side on the right side.
- Note: Refer to the AMPCARE E Series Electrode Instruction Card contained within the electrode package for electrode preparation and lead wire attachment to the electrodes.

After the electrodes are placed on the patient per the AMPCARE ESP<sup>™</sup> Therapy System Certification Training Materials, turn the unit on by pressing the only button once.

### 13. Operating Directions for Use

#### The Keypad



#### **Key Functions**

The over button allows the switching on or off of the unit when needed. Press it once to switch the unit ON. When the unit is ON, the unit can be switched OFF by pressing and holding the button for 3 seconds.

If you wish to switch OFF the unit while it is supplying stimulation, you need to press and hold the over button for 3 seconds.

The **Pros** button allows the selecting of a program from the Preset 1, Preset 2 or Manual 3 options. To change the program press and hold the **Pros** button for 3 seconds. Whenever the **Pros** button is activated, the intensity level of both channels automatically resets to 0.

When the unit is ON but the intensity level of at least one channel is above 0, you can PAUSE the unit by pressing the Pause button once. When PAUSED the output level of both channels will be zeroed and the symbol **II** will be shown between Ch1 and Ch2 on the display.

To restart the unit, press the **Pause** button once and the intensity level of both channels will be progressively restored within 6 seconds.



Channel 1 & 2 have separate intensity buttons to increase and decrease the stimulation level by pressing the "UP" arrow to increase and the "DOWN" arrow to decrease.



The Menu buttons select the adjustable parameters in the program causing them to blink.

Pressing the "+" or "-" button adjusts the individual parameter either higher or lower.

Pressing the *Enter* button locks the adjusted parameter into the program.

### 14. Programming Directions for Use

When you select one of the three programs (Preset 1, Preset 2 and Manual 3) on the AMPCARE ES<sup>™</sup>, all the parameters will be pre-defined per the program table below. However it is always possible to modify the cycle "off" time on Preset 1 and Preset 2 programs and the cycle "off" time, treatment time, frequency and phase duration on Manual 3 program. Having the ability to modify parameters can make the current more comfortable for different patients and body areas.

#### Program table:

Program	ESP1	ESP2	Manual 3	
Frequency (Hz)	30 (fixed)		5-50 adjustable in 1 Hz increments	
Phase Duration (µsec)	50 (fixed)	250 (fixed)	50-250 adjustable in 50 µsec increments	
Ramp Up (sec)	1 (fixed)			
Ramp Down (sec)	0 (fixed)			
Cycle ON Time (sec)	5 (fixed)			
Cycle OFF Time (sec)	Selectable values of 25, 20, or 15			
Program Duration (min)	30 (fixed)		5 – 30 adjustable in 5 min increments	
Intensity	0 – 20 adjustable in increments of 1*			

\* Intensity setting controls output amperage, which is limited based on phase duration. Refer to page 14 of this manual for more detailed information.

#### Programming Preset 1 (ESP1) or Preset 2 (ESP2):

If you are using a Preset program you will only be able to modify the cycle "off" time.

#### To program a treatment session:

- on/off 1. Press the On/Off button to turn on the power to the unit.
  - 2. Hold the program button down for 3 seconds until either Preset 1 or Preset 2 is shown on the screen.
    - 3. If you do not want to modify this program you may proceed to step 7.
  - 4. To modify press the "Menu up" or "Menu down" button once to program the cycle off time. The pre-defined parameter will begin blinking to allow it to be modified.
    - Press the minus "-" or plus "+" button until the desired cycle off time is selected. This can be changed from 25 to 20 or 15 seconds to lessen the amount of rest time between stimulations.
- 6. Once the parameter has been selected press the enter button to accept it.

#### To start a treatment session:

- 7. Use the up and down arrows until the prescribed intensity is visible in the LCD (left arrows for channel 1 and right arrows for channel 2).
  - 8. The timer will begin counting down automatically once the intensity is increased and the LED Light Indicator will blink green when the unit is administering current.
  - 9. Once the treatment time has reached zero the unit will automatically power off.
  - 10. Once Preset 1 or 2 has been programmed, this will be the default until it is reprogrammed.

#### **Programming Manual 3**

If you are using the Manual 3 program you will be able to modify the frequency, phase duration, treatment time and cycle off time.

#### To program a treatment session:

on/off 1. Press the On/Off button to turn on the power to the unit.



- . Hold the program button down for 3 seconds to progress to the next program; continue until Manual 3 is shown on the screen.
- 3. If you do not want to modify this program you may proceed to step 7.
- 4. To modify press the "Menu up" button to program the frequency, phase duration, and treatment time on the LCD in a clockwise direction or the "Menu down" button to program the treatment time, phase duration and frequency on the LCD in a counter clockwise direction. The pre-defined parameter will begin blinking to allow it to be modified.



- . Press the minus "-" or plus "+" button until the desired parameter is selected.
- Once the parameters have been selected press the enter button to accept them. Once you press the enter button to select the parameters, the cycle off time will automatically begin blinking and can be modified next.

#### To start a treatment session:



- Use the up and down arrows until the prescribed intensity is visible in the LCD (left arrows for channel 1 and right arrows for channel 2).
- 8. The timer will begin counting down automatically once the intensity is increased and the LED Light Indicator will blink green when the unit is administering current.
- Once the treatment time has reached zero the unit will automatically power off.
- 10. Once Manual 3 has been programmed, it will default back to the same program setting when used next.

#### Other operating functions:

- 1. When the unit is turned on and a program is not running, if any of the keys are not pressed within 5 minutes, the unit will automatically shut off.
- 2. When the unit is turned on, it will automatically enter the program that the unit had worked in before the unit was turned off.
- 3. When the batteries are low, the battery symbol flashes in the lower right corner of the LCD indicating that the batteries should be replaced.
- 4. Upon replacing the batteries the unit will need to be reprogrammed to the appropriate parameters.

### 15. Accessories

The AMPCARE ESP<sup>™</sup> Therapy System can be ordered in a kit or individual components;

- Kit Number 50706LT Includes AMPCARE ES<sup>™</sup> Dual Channel Unit, Carry Case, 2 Lead Wires, 2 AA alkaline batteries, Posture Device, User Manual and 1 case/10 packages of AMPCARE E Series Large Electrodes.
- Kit Number 50706ST Includes AMPCARE ES<sup>™</sup> Dual Channel Unit, Carry Case, 2 Lead Wires, 2 AA alkaline batteries, Posture Device, User Manual and 1 case/10 packages of AMPCARE E Series Small Electrodes.
- 1 AMPCARE ES<sup>™</sup> with 10 packages of E Series Large Electrodes Part Number: 50710LT
- 1 AMPCARE ES<sup>™</sup> with 10 packages of E Series Small Electrodes Part Number: 50710ST
- 1 case/10 packages of Replacement Large Electrodes Part Number: 50709LT
- 1 case/10 packages of Replacement Small Electrodes Part Number: 50709ST
- 1 AMPCARE ES<sup>™</sup> Replacement Lead Wire, Part Number: 50712



#### Instructions for the Ampcare Lead Wire Conduction Tester



- 1. Plug the lead wire right angle plug into the output socket of either Channel 1 or Channel 2 of your Ampcare ES Unit.
- 2. Place the red lead wire pin in the red socket and the black lead wire pin in the black socket of the conduction tester.
- Turn up the intensity/amplitude for the channel that you are testing. The light in the middle of the conduction tester should illuminate. Turn up the intensity for the designated channel until the light illuminates.
- The light may light up continuously or blink depending on the program settings (i.e. frequency and phase duration) when you test the device. If it blinks it should be a systematic blinking with set intervals (e.g. 5 seconds on and 25, 20 or 15 seconds off – per the duty cycle selected).
- 5. Gently pivot the right angle plug to ensure a good connection during the stimulation on times.
- 6. Gently move your fingers up the wire to the red and black shields taking care not to touch the metal pins.
- 7. This should ensure no interruptions in connectivity. If the light does not light up or you notice a break in connectivity the most likely reason is that there is a short in your lead wire. In that case please test the other lead wire in the same channel to confirm this.
- 8. Once you have tested a good lead wire and confirmed that the previous lead wire has a fault, you should dispose of the faulty lead wire.
- 9. Lead wires are a disposable item and replacements can be sourced from Ampcare, LLC.
- 10. If after replacing the lead wire you still encounter a problem with connectivity, contact your dealer or Ampcare, LLC.

### 16. Training Program:

The AMPCARE ESP<sup>™</sup> Therapy System certification program is recommended for healthcare providers prior to administering the technique. The training program educates the healthcare professional on the indications, contraindications and the proper electrode placement of this treatment technique. It is recommended that only the AMPCARE E Series Electrodes be used with the AMPCARE ESP<sup>™</sup> Therapy System.

### 17. Maintenance

Clean the unit with a clean, lint free cloth moistened with water and mild antibacterial soap. If a more sterile cleaning is needed, use a cloth moistened with an antimicrobial cleaner. Do not submerse the unit in water.

#### Long Term Storage

If the unit is to be stored or not used for 30 days or longer, remove the batteries.

### 18. Warranty

In addition to your statutory rights, the distributor agrees that if any defect in materials or workmanship appears in this product within two years after the original date of consumer purchase, it will repair or, at its option, replace the product in question free of charge. This applies only if the product has been used for domestic purposes and has not been damaged through misuse, accident or neglect and has not been modified or repaired by anyone other than an authorized AMPCARE ES<sup>TM</sup> distributor or one of its authorized agents. If a defect appears, please check that the article is being used in accordance with instructions. If so, return it with this warranty and proof of purchase to your nearest AMPCARE ES<sup>TM</sup> dealer. Note: only our authorized service agents should carry out repairs of the AMPCARE ES<sup>TM</sup>.

#### Exclusions:

Batteries, AMPCARE E Series Electrodes and lead wires are disposable accessories and are not included within this warranty.

#### Life expectancy:

Based on common usage and not being damaged through misuse, accident or neglect the AMPCARE ES<sup>TM</sup> life expectancy is 3 years. Careful handling, storage, and not dropping or spilling liquid onto the AMPCARE ES<sup>TM</sup> may increase the life expectancy. The lead wires are also dependent on common usage with a life expectancy of 6 months. Careful handling and storage may increase the life expectancy. Twisting and/or coiling the leads (i.e. wrapping the leads around the AMPCARE ES<sup>TM</sup>) can result in a significant decrease in the life expectancy of the leads and should be avoided.

#### Servicing:

When the AMPCARE ES<sup>™</sup> requires servicing, contact the selling dealer or AMPCARE, LLC directly.

The Ampcare ES Unit is FDA cleared, CE Marked and battery operated, not requiring calibration. Please check with your medical facility to see if they require an annual safety check; Ampcare does not perform this service.

#### Warranty Repair/Replacement

All units returned to for servicing must include the following:

- 1. Written statement containing the following information:
  - Unit Serial Number inside battery compartment
  - Contact Person with phone and fax numbers
  - Billing Address
  - Shipping Address (Where to Ship Unit after Repair)
  - Detailed Description of Problem or Symptoms
- 2. Copy of original invoice issued at purchase of unit.
- 3. Contact AMPCARE, LLC at 1-682-561-2444 or info@ampcarellc.com for shipping information.

### 19. Ordering Supplies

All replacement accessories can be obtained from:

AMPCARE, LLC 1120 South Freeway Fort Worth, Texas 76104 Phone: (682) 561-2444 Fax: (817) 923-1377

Orders can be placed online by going to www.ampcarellc.com/orders. Your Ampcare Certification number is required and can be entered in the Certification number text box to allow you to complete your online order form.

#### Statement:

CE This unit is CE Marked, according to the 93/42/EEC 0197 Directive and is classified as a Medical Device class IIa.

Part numbers from the order form are:

- 50706LT ESP™ Kit Ampcare ES™, Ampcare E Series Large Electrodes (10 pkg) and a Posture Device
- 50706ST ESP™ Kit Ampcare ES™, Ampcare E Series Small Electrodes (10 pkg) and a Posture Device
- 50709LT AMPCARE E Series Large Electrodes (10 pkg)
- 50709ST AMPCARE E Series Small Electrodes (10 pkg)
- 50710LT AMPCARE ES™ with 10 packages of Ampcare E Series Large Electrodes, Carry Case, 2 Lead Wires. 2 AA alkaline batteries and User Manual.
- 50710ST AMPCARE ES™ with 10 packages of Ampcare E Series Small Electrodes, Carry Case, 2 Lead Wires, 2 AA alkaline batteries and User Manual.
- 50711 Pre-TENS Skin Prep Wipes (50/box)
- Replacement Lead Wires for AMPCARE ES™ 50712 (set of 2)



EUROPEAN AUTHORISED REPRESENTATIVE: Healthcare Finance Solutions Ltd The Shrubbery, 14 Church Street Whitchurch Hants, RG28 7AB, England Tel: 01256 346060 Fax: 01256 346050

ESMAN 112917 Rev. A