

HeartSine samaritan® PAD SAM 450P Trainer

model TRN-450-1

**User Manual** 



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This User Manual provides instructions on how to operate the HeartSine samaritan PAD 450P Trainer.

The HeartSine samaritan PAD 450P Trainer is a non-medical device intended to be used for the training of emergency responders in the proper use of the HeartSine samaritan PAD 450P (SAM 450P) automated external defibrillator. The HeartSine samaritan PAD 450P Trainer has no therapeutic capabilities and must not be used in real life rescue situations.



**IMPORTANT**: In order to avoid confusion in the event of a real life rescue, do not store or leave the HeartSine samaritan PAD 450P Trainer near the HeartSine samaritan PAD 450P automated external defibrillator.

To allow quick and easy identification, the HeartSine samaritan PAD 450P Trainer incorporates a yellow front user interface membrane whereas the SAM 450P automated external defibrillator has a navy blue/black front membrane.

HeartSine recommends that responders who may use one of its defibrillators should be trained in Cardiopulmonary Resuscitation with defibrillator use (CPR-D). The HeartSine samaritan PAD 450P Trainer is intended to be used by approved CPR-D training providers for this purpose.

The HeartSine samaritan PAD 450P Trainer is factory configured to operate in accordance with the joint American Heart Association/European Resuscitation Council (AHA/ERC) 2015 guidelines for CPR. The device comes with six pre-programmed scenarios based on these guidelines.

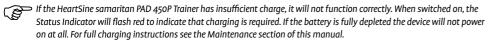
Should the CPR guidelines change, software will be available to upgrade the HeartSine samaritan PAD 450P Trainer to comply. Please contact your HeartSine authorized distributor or HeartSine Technologies directly.

Once turned on the HeartSine samaritan PAD 450P Trainer will play audible voice prompts with accompanying visual indicators. The HeartSine samaritan PAD 450P Trainer may also be controlled using the accompanying remote control included with the device.

Please contact your HeartSine authorized distributor for a list of replacement accessories.

# Preparing the HeartSine samaritan PAD 450P Trainer for use

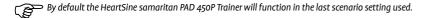
- 1) Ensure that the HeartSine samaritan PAD 450P Trainer is fully charged (see the Maintenance section of this manual).
- 2) Place the HeartSine samaritan PAD 450P Trainer and the Trainer-Pak" on a flat surface. Push the Trainer-Pak into the opening of the HeartSine samaritan PAD 450P Trainer and listen for a "click" sound to ensure that it is properly inserted.
- 3) Place the batteries supplied with your HeartSine samaritan PAD 450P Trainer into the remote control.
- Do not press any buttons while inserting the remote control batteries as this will reset the remote control ID.
- 4) Press the On/Off button on the HeartSine samaritan PAD 450P Trainer and listen to the voice prompts to ensure that the unit is functioning.



# Turning the HeartSine samaritan PAD 450P Trainer on and off

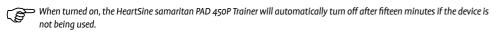
To turn on the HeartSine samaritan PAD 450P Trainer, press the green On/Off button.





To turn off the HeartSine samaritan PAD 450P Trainer, press the On/Off button again.

Once the HeartSine samaritan PAD 450P Trainer has been turned on, it may be turned off using the accompanying remote control. To turn off the HeartSine samaritan PAD 450P Trainer, press the red Off button on the remote control.



# Preparing the HeartSine samaritan PAD 450P Trainer for use



A. Data port - The data port connects the HeartSine samaritan PAD 450P Trainer to a PC via the USB data cable. When the HeartSine samaritan PAD 450P Trainer is connected, the training provider can change settings, such as training scenarios (see page 8 for training scenarios).

**B. Battery charge status LED** - The battery charge status LED flashes red when the HeartSine samaritan PAD 450P Trainer needs to be charged, becomes a steady red when charging and turns off when fully charged.

C. Status indicator - Flashing green when in use; HeartSine samaritan PAD 450P Trainer is ready for use, Flashing red when in use; HeartSine samaritan PAD 450P Trainer requires charging.

**D. Shock button -** Press this button to simulate delivery of a therapeutic shock.

**E. Do not touch indicator** - Do not touch the patient when the action arrows around this icon are flashing. The SAM 450P may be analyzing the patient's heart rhythm or preparing to deliver a shock.

F. Speaker - The speaker plays recorded voice prompts and gives instructions to the trainee.

G. Trainer-Pak cartridge - The Trainer-Pak cartridge houses the pads. Pull the green tab to access the pads.

**H. On/Off button** - Press this button to turn the device on and off. (If pressed while a shock is advised, a warning is issued "Warning, Off button pressed"; the device will not power off unless you press the button again within three seconds.)

**I. Safe to touch indicator** - It is safe to touch the patient when the action arrows around this icon are flashing. You may perform CPR or check the patient.

J. CPR Rate Advisor - This is an array of lights which provide a graduated indication of the speed of the CPR compressions. When green lights illuminate the compressions are within the correct rate range.

K. Pads placement indicator - The action arrows around this icon will flash to instruct the user that the SAM 450P pads should be attached to the patient as indicated.

L. Action arrows - The action arrows around an icon will flash to indicate the actions that the user should perform.

# Managing the electrodes

### Using the electrodes

The training scenarios include audible prompts to remove the electrodes from the Trainer-Pak and to position the electrode pads as indicated. Follow the steps below when prompted to do so.

- 1) Pull the green tab to open the HeartSine samaritan PAD 450P Trainer Trainer-Pak cartridge and fully extend the electrode cables.
- 2) Peel the electrode pads from their protective liners.
- Position the electrode pads as indicated by the Pads Placement Indicator; sternum and apex electrode pads are clearly
  identified on their respective pads.
- 4) Press the pads firmly to ensure that proper contact is made.

### Rewinding the electrodes after use

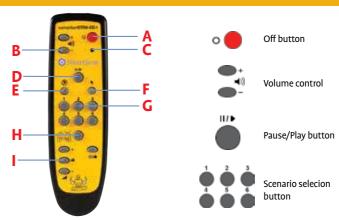
- 1) Re-attach the protective liners to the electrode pads, or replace with new pads.
- 2) Fold the pads together so that the liner is on the outside.
- 3) Let the electrodes hang from the device and use the handle in the blue coil mechanism to fully rewind the electrodes:



- A Coil Mechanism
- **B** Coil Handle

- 4) Place the pads on top of the Trainer-Pak cartridge, ensuring that the wires are beneath the pads.
- 5) Close the Trainer-Pak cartridge by sliding the yellow tray into place.

### The remote control



- A. Turning off the HeartSine samaritan PAD 450P Trainer The remote control can be used to turn off the HeartSine samaritan PAD 450P Trainer. To turn off the HeartSine samaritan PAD 450P Trainer. To turn off the HeartSine samaritan PAD 450P Trainer.
- **B. Changing the volume** There are four volume settings available on the HeartSine samaritan PAD 450P Trainer. To increase the volume press the '+' button and to decrease the volume press the '-' button.
- **C. Low battery indicator** During use of the remote control, if the battery is low on charge the low battery indicator flashes red each time a button on the remote is pressed. This alerts the training provider to change the batteries in the remote control.
- D. Pausing the HeartSine samaritan PAD 450P Trainer The HeartSine samaritan PAD 450P Trainer may be paused during training. To pause the HeartSine samaritan PAD 450P Trainer press the Pause/Play button (||/|>). The HeartSine samaritan PAD 450P Trainer will remain paused until the Pause/Play button is pressed again, at which point it will continue to play the scenario selected.
- **E. 'No shock advised' scenario -** When the 'no shock advised' scenario button is pressed, the HeartSine samaritan PAD 450P Trainer plays the 'no shock advised' voice prompt subsequently followed by the rest of the voice prompts in the programmed scenario.
- F. 'Shock required' scenario When the 'shock advised' scenario button is pressed, the HeartSine samaritan PAD 450P Trainer plays the 'shock advised' voice prompt subsequently followed by the rest of the voice prompts in the programmed scenario.
- **G. Changing the scenario** The HeartSine samaritan PAD 450P Trainer comes with six preprogrammed training scenarios. (For details of the scenarios see the training scenarios section of this manual.) The scenario can be changed by pressing the appropriate number button on the remote control. For instance pressing '3' will select training scenario three. Once the scenario has been changed the device will operate as detailed in the scenarios section. The device will remain in this scenario until a new scenario is selected.
- H. Attach electrode pads The attach electrode pads button is pressed to simulate a good connection between the pads and the patient.
- I. CPR Rate Advisor rate control One of the three CPR Rate Advisor rate control buttons is pressed to simulate the prompts heard on the AED to indicate the quality of the CPR rate: "Press faster", "Press slower" or "Good speed".

The HeartSine samaritan PAD 450P Trainer has six preprogrammed training scenarios to choose from. All preprogrammed scenarios are based on AHA/ERC 2015 guidelines. Details of the preprogrammed scenarios are given below.

#### Scenario 1

Setup mode Trainee to "Call for Medical assistance", "Pull green tab", etc
 User intervention Training provider presses the Attach electrode pads button to confirm electrodes placed

3. Monitor mode Trainee hears "Assessing heart rhythm", "Do not touch the patient", etc

4. Shock advised Trainee to press the shock button

CPR mode Trainee to perform CPR with guidance from prompts

6. Monitor mode Trainee hears "Assessing heart rhythm", "Do not touch the patient", etc

7. No shock advised Trainee notified that no shock is advised

8. CPR mode Trainee to perform CPR with guidance from prompts

9. Repeat Trainee to repeat Steps 6 to 8 until 'On/Off' button is pressed

#### Scenario 2

1. Setup mode Trainee to "Call for Medical assistance", "Pull green tab", etc

2. User intervention Training provider presses the Attach electrode pads button to confirm electrodes placed

3. Monitor mode Trainee hears "Assessing heart rhythm", "Do not touch the patient", etc

No shock advised Trainee notified that no shock is advised

5. CPR mode Trainee to perform CPR with guidance from prompts

6. Monitor mode Trainee hears "Assessing heart rhythm", "Do not touch the patient", etc

Shock advised Trainee to press the shock button

8. CPR mode Trainee to perform CPR with guidance from prompts

Repeat Trainee to repeat Steps 6 to 8 until 'On/Off' button is pressed

### Scenario 3

1. Electrodes Device assumes the electrodes are already attached

2. Monitor mode Trainee hears "Assessing heart rhythm", "Do not touch the patient", etc

Check Pads Trainee to check the pad placement.

4. User intervention Training provider presses the Attach electrode pads button to confirm electrodes placed

5. Monitor mode Trainee hears "Assessing heart rhythm", "Do not touch the patient", etc

6. Shock advised Trainee to press the shock button

7. CPR mode Trainee to perform CPR with guidance from prompts

8. Monitor mode Trainee hears "Assessing heart rhythm", "Do not touch the patient", etc

9. No shock advised Trainee notified that no shock is advised

10. CPR mode Trainee to perform CPR with guidance from prompts

11. Repeat Trainee to repeat Steps 3 to 10 until 'On/Off' button is pressed

#### Scenario 4

1. Electrodes Device assumes electrodes are already attached

2. Monitor mode Trainee hears "Assessing heart rhythm", "Do not touch the patient", etc

3. Shock advised Trainee to press the shock button

4. CPR mode Trainee to perform CPR with guidance from prompts

5. Monitor mode Trainee hears "Assessing heart rhythm", "Do not touch the patient", etc

6. Shock advised Trainee to press the shock button

7. CPR mode Trainee to perform CPR with guidance from prompts

8. Monitor mode Trainee hears "Assessing heart rhythm", "Do not touch the patient", etc

No shock advised Trainee notified that no shock is advised

10. CPR mode Trainee to perform CPR with guidance from prompts

11. Repeat Trainee to repeat Steps 5 to 10 until 'On/Off' button is pressed

#### Scenario 5

Scenario 5 is the same as Scenario 1 with the addition of audible indications of when to perform rescue breaths during CPR mode.

1. Setup mode Trainee to "Call for Medical assistance", "Pull green tab", etc

2. User intervention Training provider presses the Attach electrode pads button to confirm electrodes placed

3. Monitor mode Trainee hears "Assessing heart rhythm", "Do not touch the patient", etc

4. Shock advised Trainee to press the shock button

5. CPR mode Trainee to perform CPR with guidance from prompts; this includes an audible indication of when to perform

rescue breaths. The metronome changes from a "beep" to a "tick" for the duration of ten compressions.

6. Monitor mode Trainee hears "Assessing heart rhythm". "Do not touch the patient", etc

7. No shock advised Trainee notified that no shock is advised

8. CPR mode Trainee to perform CPR with guidance from prompts; this includes an audible indication of when to perform

rescue breaths. The metronome changes from a "beep" to a "tick" for the duration of ten compressions.

Repeat Trainee to repeat Steps 6 to 8 until 'On/Off' button is pressed

#### Scenario 6

Scenario 6 is the same as Scenario 2 with the addition of audible indications of when to perform rescue breaths during CPR mode.

1. Setup mode Trainee to "Call for Medical assistance", "Pull green tab", etc

2. User intervention Training provider presses the Attach electrode pads button to confirm electrodes placed

3. Monitor mode Trainee hears "Assessing heart rhythm", "Do not touch the patient", etc

4. No shock advised Trainee notified that no shock is advised

5. CPR mode Trainee to perform CPR with guidance from prompts; this includes an audible indication of when to perform

rescue breaths. The metronome changes from a "beep" to a "tick" for the duration of ten compressions.

6. Monitor mode Trainee hears "Assessing heart rhythm", "Do not touch the patient", etc

7. Shock advised Trainee to press the shock button

8. CPR mode Trainee to perform CPR with guidance from prompts; this includes an audible indication of when to perform

rescue breaths. The metronome changes from a "beep" to a "tick" for the duration of ten compressions.

9. Repeat Trainee to repeat Steps 6 to 8 until 'On/Off' button is pressed

# Manual control of the HeartSine samaritan PAD 450P Trainer

The remote control allows training providers to control the scenario manually. When turned on, the HeartSine samaritan PAD 450P Trainer will operate as described in the training scenarios listed. Training providers can override this by pressing the 'Shock required', 'No shock required' or 'Attach electrode pads' button.



# Shock required



Pressing the 'Shock required' button will cause the HeartSine samaritan PAD 450P Trainer to override the selected training scenario and simulate a shockable rhythm. Each subsequent analysis period will advise a shock to be delivered until either the HeartSine samaritan PAD 450P Trainer is turned off or the 'No shock required' button on the remote control is pressed.



### No shock required



Pressing the 'No shock required' button will cause the HeartSine samaritan PAD 450P Trainer to override the selected training scenario and simulate a non-shockable rhythm. Each subsequent analysis period will advise no shock to be delivered until either the HeartSine samaritan PAD 450P Trainer is turned off or the 'Shock required' button on the remote control is pressed.



# Attach electrode pads



If the 'Attach electrode pads' button is pressed the HeartSine samaritan PAD 450P Trainer will play the 'Attach electrode pads' prompts during the analysis period of operation. The HeartSine samaritan PAD 450P Trainer will continue to play 'Attach electrodes pads' prompts until the 'Attach electrode pads' button is pressed again.

# **CPR Rate Advisor training module**

## HeartSine samaritan PAD with CPR Rate Advisor, SAM 450P

The SAM 450P automated external defibrillator incorporates a CPR feedback module called 'CPR Rate Advisor'. The SAM 450P uses the CPR Rate Advisor function to provide simple feedback on the quality of the compression rate being provided by rescuers. The CPR Rate Advisor analyzes the rate at which compressions are being performed, and prompts the rescuer to push faster or slower as appropriate. If the CPR being provided is within the correct speed range, the SAM 450P will play a 'Good speed' prompt.

All audible prompts are accompanied by visual prompts on the CPR Rate Advisor icon.

# **CPR Rate Advisor training**

Training providers can use the remote control to simulate the CPR Rate Advisor function on the HeartSine samaritan PAD 450P Trainer by using the remote control. Training providers should observe the CPR being provided by the trainees and based on observations press the appropriate button.

The HeartSine samaritan PAD 450P Trainer will initially assume correct compressions are being performed and play the audible prompt:



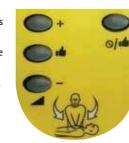
"Good Speed

The CPR control buttons are located at the bottom of the remote control. The buttons to the left are used to provide feedback on the rate at which the trainee is performing compressions, and the buttons to the right are used to toggle between the Begin CPR prompt (if no CPR is being performed) and the Good speed prompt.

Fast Compressions

Correct Rate

Slow Compressions



Begin CPR / Good Speed (toggle)

# **CPR Rate Advisor training module**

### Compressions

The HeartSine samaritan PAD 450P Trainer can mimic the CPR Rate Advisor function on the SAM 450P defibrillator.



#### **CPR** not started

If the trainee has not started to perform CPR, press the 'Begin CPR/good speed' button. The HeartSine samaritan PAD 450P Trainer will play the audible prompt:



"Begin CPR"



The CPR Rate Advisor on the HeartSine samaritan PAD 450P Trainer has a single flashing red light on the left hand side of the display as shown. The trainee should begin CPR immediately.



### **Compressions Too Slow**

If the trainee is performing compressions too slowly, press the 'Slow compressions' button.



When the button is pressed once, the two amber LEDs on the left hand side of the CPR Rate Advisor illuminate to indicate the trainee is providing CPR compressions at a rate slower than the AHA/ERC Guidelines. The trainee should increase the speed of their compressions.



Press the button a second time. The illuminated amber LEDs will be replaced by two red LEDs and the voice prompt will play:



"Push faster"

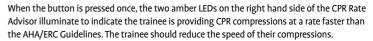


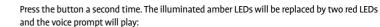
# **Compressions Too Fast**

If the trainee is performing compressions too quickly, press the 'Fast compressions' button.











"Push slower"



### **Compressions Correct Rate**

If the trainee is performing compressions at the correct rate, press the 'Correct rate' button. The HeartSine samaritan PAD 450P Trainer will play the prompt:



"Good speed"



Four green LEDs in the center of the CPR Rate Advisor on the HeartSine samaritan PAD 450P Trainer will illuminate. The trainee should maintain this speed for the compressions.

#### Maintenance

# HeartSine samaritan PAD 450P Trainer battery management

The HeartSine samaritan PAD 450P Trainer contains a rechargeable battery. It is recommended that you ensure the HeartSine samaritan PAD 450P Trainer is fully charged prior to commencing training activities.

When fully charged, the HeartSine samaritan PAD 450P Trainer will provide approximately seven hours of usage before it needs to be recharged.

The HeartSine samaritan PAD 450P Trainer will monitor the capacity of the battery as it approaches depletion. A minimum of one hour prior to the battery becoming depleted the HeartSine samaritan PAD 450P Trainer will play the following message:



"Warning. Low battery"

If this warning is heard you may continue to use your HeartSine samaritan PAD 450P Trainer for a limited period of time. If the battery becomes completely depleted the HeartSine samaritan PAD 450P Trainer will shut itself down. At this point the HeartSine samaritan PAD 450P Trainer should be recharged.

### Charging and recharging the HeartSine samaritan PAD 450P Trainer

To safely charge or recharge the HeartSine samaritan PAD 450P Trainer follow the instructions given below.

- 1) Insert the charger adaptor into the socket on the side of the HeartSine samaritan PAD 450P Trainer. Ensure that the adaptor is fully inserted.
- 2) Plug the charger into the mains power outlet.
- 3) Leave the HeartSine samaritan PAD 450P Trainer to charge. The Battery Charge Status LED (located beside the socket) will be red when fast charging and will flash when charging is almost complete. Once charging is complete the LED will switch off. Charging a depleted HeartSine samaritan PAD 450P Trainer will take a maximum of six hours.
- 4) Remove the adaptor from the HeartSine samaritan PAD 450P Trainer. Turn on the HeartSine samaritan PAD 450P Trainer to ensure that the device is working.

If the HeartSine samaritan PAD 450P Trainer is switched on during charging, the charger should be switched off then on again to restart fast charging.

The HeartSine samaritan PAD 450P Trainer must only be charged with the charger supplied with it. Use of any other charging device will nullify the warranty and may result in damage to the HeartSine samaritan PAD 450P Trainer.

The HeartSine samaritan PAD 450P Trainer and charger are designed for indoor use only. Do not use in wet or damp environments.

There are no user serviceable parts inside your HeartSine samaritan PAD 450P Trainer, HeartSine samaritan PAD 450P Trainer Trainer-Pak or charger. Do not open these products. In the unlikely event of a malfunction, please contact your distributor immediately.

#### Remote control batteries

The remote control contains a low battery warning indicator. If this indicator flashes red two times after a button on the remote control is pressed, the batteries within the remote control needs to be replaced.

The remote control uses two standard AAA batteries. The batteries can be accessed by removing the battery cover at the back of the remote control.



[ST Inserting the batteries into the remote control while pressing the Off button will cause the remote control to enter pairing mode and take a new transmission ID. This will be different to that previously stored on the HeartSine samaritan PAD 450P Trainer. If this occurs accidentally it will be necessary to complete the pairing procedure in full to pair the remote control with the HeartSine samaritan PAD 450P Trainer again.

Normal battery replacement does not cause a problem since pairing is only initiated when the Off button is also held

### HeartSine samaritan PAD 450P Trainer Configuration Tool

The HeartSine samaritan PAD 450P Trainer Configuration Tool is software that can be downloaded for free from the HeartSine website (www.heartsine.com). This software allows you to upgrade your HeartSine samaritan PAD 450P Trainer. The following options are available.

### Language

The HeartSine samaritan PAD 450P Trainer can be reprogrammed to operate with audible prompts in any one of a selection of languages. Download the current HeartSine samaritan PAD 450P Trainer Configuration Tool user manual from the HeartSine website for instructions on how to do this.

### Pairing a remote control with the HeartSine samaritan PAD 450P Trainer

Each HeartSine samaritan PAD 450P Trainer is operated with a specific remote control. This is to allow multiple devices to be used in close vicinity without interference. In the unlikely event that your remote control no longer operates with your HeartSine samaritan PAD 450P Trainer it may need to be paired with your HeartSine samaritan PAD 450P Trainer again.

The HeartSine samaritan PAD 450P Trainer Configuration Tool can be used to pair a remote control with your HeartSine samaritan PAD 450P Trainer. Full instructions are contained within the accompanying user manual.

### **Device identifications**

Each HeartSine samaritan PAD 450P Trainer is given an identification number between 001 and 255 during manufacture. The remote control for each HeartSine samaritan PAD 450P Trainer is then given the same identification number. In the unlikely event that two devices with the same ID number are being used at the same time, use the HeartSine samaritan PAD 450P Trainer Configuration Tool to assign new numbers to the devices. It will be necessary to pair the device with its remote control after assigning a new ID number.

The following is a brief overview of the fundamentals of CPR for lay rescuers as advised by both the American Heart Association (AHA) and theEuropean Resuscitation Council (ERC) in their 2015 published Guidelines for CPR and ECC. This is intended only as a quick reference for trained CPR providers. HeartSine recommends that all potential users of the SAM 450P are trained by a competent training organization in both the use of CPR and SAM 450P, prior to placing a SAM 450P into service. Should the Guidelines change, software will be available to upgrade the SAM 450P to comply. Please contact your HeartSine authorized distributor or HeartSine Technologies directly.

CALL Emergency Services (119/999/911 etc.). Send for an AED.

Person not responsive? Address person and shake on shoulder. Call Emergency Services.

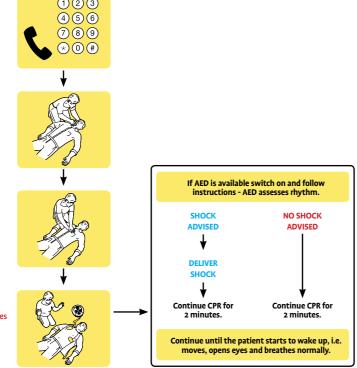


Perform CPR following the latest
AHA or ERC guidelines.
Perform CPR until an AED is available

OR arrival of emergency physician. Engage other people to help you and alternate CPR.

If available use an AED.

Continue CPR until Emergency Services arrive. Alternate with second person after one cycle or 2 minutes.



### Disposal instructions

The HeartSine samaritan PAD 450P Trainer is a reusable device. If maintained in accordance with the instructions in this manual it has a warranty period of two years from the date of manufacture.

If you wish to dispose of the HeartSine samaritan PAD 450P Trainer unit, it should be disposed of at an appropriate recycling facility according to national, state and local requirements. Alternatively return the unit to your local distributor or HeartSine Technologies for disposal.

### Disposal within the European Union:

Do not dispose of the HeartSine samaritan PAD 450P Trainer unit as unsorted municipal waste: keep the HeartSine samaritan PAD 450P Trainer separate, to be reused or recycled in accordance with Directive 2002/96/EEC of the European Parliament and the Council of the European Union on Waste Electronic and Electrical Equipment (WEEE), or return to your local distributor or HeartSine Technologies for disposal.

### **Warranty exclusion**

HeartSine Technologies or its authorized distributors are not obliged to carry out service/repairs under warranty if:

- a. Unauthorized modifications have been made to the device.
- b. Non-standard components are used.
- c. The user has not used the device in accordance with the indications for use or the instructions provided in this manual.
- d. The serial number of the apparatus is removed, defaced, misused or altered.
- e. The device, electrodes or batteries are stored or used operationally outside of environmental specifications.
- f. The device has been tested using unapproved methods or inappropriate equipment (see the Maintenance section of this manual).

Any claims made under warranty must be directed via your distributor from whom the device was originally purchased. Before carrying out service under warranty, HeartSine Technologies requires evidence of purchase. The product must be used in accordance with the User Manual and for the purpose for which it was intended. If you have any questions please contact support@heartsine.com for assistance.



www.heartsine.com

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**C E** The HeartSine products described in this brochure 0120 meet the European Medical Directive requirement.



UL Classified. UL)us See complete marking on product.

H041-019-300-2 EN