Powerheart® G5
AED Training Simulator
Instructions for Use

70-01090-01D
Copyright © 2012 Cardiac Science Corporation. All rights reserved.

Contents
◆ Product description 2
◆ Controls and indicators 2
◆ Waveforms 3
◆ Exercise 3
◆ Battery saver feature 4
◆ Cleaning and sterilization 4
◆ Service 4
Product description
The Training Simulator is an easy to use training tool that allows practice in working with an AED and defibrillation procedures.
Note: The Training Simulator is intended for training and sales demo purposes only. Not for equipment testing, maintenance, verification, or use on humans.

Controls and indicators
The Training Simulator has eight waveform keys. LED indicators in each key show you which waveform is running.

**ON-OFF**
Press to power on and to power off
VF is selected automatically when powered on.

**LOW BATT**
Red indicator illuminates when battery voltage is low.

**DEFIB DSCHG**
Green indicator illuminates for two seconds when discharge is delivered from the AED.

**convert**
Press before defib discharge to activate another rhythm immediately after discharge.

Convert
The convert feature allows the simulator to convert automatically from one shockable rhythm (the running rhythm) to another rhythm (the waiting rhythm) when a discharge is delivered from the AED. To perform a convert operation:

1. Press the key of a shockable rhythm.
2. Press **convert**. The indicator of the running rhythm pulses brighter.
3. Press the key of the rhythm you want simulated immediately after defibrillation discharge.
4. Deliver the charge from the AED.

To cancel a convert operation before it is completed, either press **convert** again or press the key of the running rhythm. If a convert operation is started but not completed within two minutes, it cancels automatically.
Waveforms

<table>
<thead>
<tr>
<th>Type</th>
<th>Rate (bpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VF (Ventricular Fibrillation)</td>
<td>More than 200</td>
</tr>
<tr>
<td>VT fast (Ventricular Tachycardia (wide QRS))</td>
<td>Approximately 185</td>
</tr>
<tr>
<td>VT slow (Ventricular Tachycardia (wide QRS))</td>
<td>Approximately 140</td>
</tr>
<tr>
<td>NSR (Normal Sinus Rhythm); non-shockable</td>
<td>Approximately 72</td>
</tr>
<tr>
<td>ASYS (Asystole); non-shockable</td>
<td>Rate not applicable</td>
</tr>
<tr>
<td>SVT slow (Supra Ventricular Tachycardia)</td>
<td>Approximately 170</td>
</tr>
<tr>
<td>Artifact (Unusable signal); frequency and/or amplitude exceed ECG parameters</td>
<td>Rate not applicable</td>
</tr>
<tr>
<td>SVT fast (Supra Ventricular Tachycardia)</td>
<td>Approximately 210</td>
</tr>
</tbody>
</table>

Exercise

This example exercise demonstrates how the Training Simulator can be used for training.

Example: Output the VF waveform to the AED first. After the AED delivers a shock, switch to NSR.

A. Simulator setup

1. Press VF. The VF indicator glows steadily.
2. Press convert. The VF indicator pulses brighter.
3. Press NSR. The NSR indicator begins blinking. The VF indicator glows steadily again.

B. Connect to the AED

1. Open the lid of the AED. If packaged defibrillation pads are under the lid, disconnect and remove them.
2. Connect the simulator cable to the AED defibrillation pads socket.

   The AED gives the following voice prompts:
   
   “Do not touch patient. Analyzing rhythm.”
   “Shock advised.”

   • If the AED is semi-automatic: “Stand clear. Press red flashing button to deliver shock.”
   • If the AED is automatic: “Shock will be delivered in three, two, one.”

Both models: “Shock delivered.”
Battery saver feature

The Training Simulator powers off automatically about 30 minutes after a key was last pressed or after a defibrillator discharge was last detected. This is normal operation.

If you want to disable the battery saver feature:

1. Power off the Simulator.
2. Press and hold convert, then press and release ON-OFF.
   The simulator powers on.
3. When the VF indicator begins blinking, release the convert key. (The VF indicator continues to blink for approximately one second.)
   The battery saver feature is now disabled.

When you power off the Simulator, it returns to normal battery saver operation the next time it is used.

Cleaning and sterilization

Clean the Training Simulator with a sponge or cloth moistened with water or rubbing alcohol.

Do not use abrasives or solvents. Do not steam, autoclave, or gas sterilize. Improper cleaning or sterilization can damage the Simulator.

Service

If your Simulator needs service, or if you have questions about its operation, please contact Cardiac Science Technical Support or your local representative.