

# User's Guide

Cardiac Science Powerheart®  
Automated External Defibrillator



## 1: Assess the patient

Determine that the patient is more than 8 years of age or weighs more than 25 kg (55 lbs) and is both:

- ◆ Unresponsive
- ◆ Not breathing or not breathing normally



DO NOT delay therapy to determine the patient's exact age or weight.

### CALL EMERGENCY MEDICAL SERVICES!

**Note:** When the patient is 8 years of age or younger or weighs 25 kg (55 lbs) or less, use the AED with pediatric defibrillation pads, if available. See the directions for use accompanying pediatric pads to replace preinstalled pads with pediatric pads.

## 2: Prepare the patient

1. Place the AED next to the patient.

**Note:** The normal use for the AED is with it lying horizontally.

2. Open the AED lid.
3. Remove clothing from the patient's chest.
4. Ensure that the patient's skin is clean and dry.
5. Dry the patient's chest and shave excessive hair if necessary.



## 3: Place pads

### When the AED prompts...

### Do this...

"Tear open white package across dotted line and remove pads."

1. Keeping the pads connected to the AED, tear open the package.
2. Remove the pads from the package.  
You can leave the package attached to the pad wires.

"Peel one of the white pads completely from blue plastic."

3. With a firm, steady pull, peel one pad away from the blue plastic liner.  
You can use either pad.

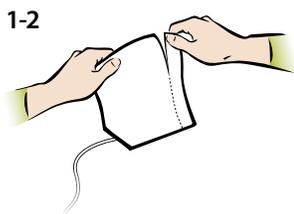
"Firmly place the pad without the blue plastic on patient's bare chest, exactly as shown on pads."

4. Place the pad in either location on the chest.

"Next, peel second white pad from the blue plastic. Firmly place the second pad on the other location exactly as shown on pads."

5. Pull the blue plastic from the second pad.
6. Place the pad on the other location on the chest.

**Note:** Cardiac Science's standard defibrillation pads are non-polarized and can be placed in either position as shown on the pad package. The package itself can be left attached to the defibrillation pads wires.



## 4: Analyze the ECG

When the AED prompts...	Do this...
<p>"Do not touch the patient! Analyzing heart rhythm. Please wait."</p> <p>The AED begins analyzing the cardiac rhythm of the patient.</p>	<ol style="list-style-type: none"> <li>1. Do not touch the patient.</li> <li>2. Wait for the next prompt.</li> </ol>



During the analysis phase, you may hear one or more of these prompts:

If the AED prompts...	This is the problem...	Do this...
"Open lid to continue rescue"	The lid of the AED is closed.	Ensure that the lid is fully open.
"Press pads firmly to patient's bare chest"	The pads are not properly placed or are loose.	Ensure that pads are firmly placed on clean, dry skin.
"Make sure pad connector is plugged into AED"	The pads are disconnected from the AED.	Ensure that the connector is plugged properly into the AED.
"Analysis interrupted. Stop patient motion." The AED restarts the analysis.	The patient is excessively jostled or there is strong electromagnetic emitting equipment nearby (within 2 meters).	Remove the electronic device or stop the excessive motion.

## 5: Deliver a shock

When the AED prompts...	Do this...
"Shock advised. Do not touch the patient"	Ensure that no one is touching the patient.
<p><b>Automatic model:</b> "Shock will be delivered in 3, 2, 1."</p> <p>The AED delivers the defibrillation shock automatically.</p>	<p><b>Automatic model:</b> Ensure that no one is touching the patient.</p>
<p><b>Semi-automatic model:</b> When the AED is ready to deliver a defibrillation shock, the Shock button flashes. "Press red flashing button to deliver shock."</p>	<p><b>Semi-automatic model:</b> Press the Shock button. If you do not press the Shock button within 30 seconds of hearing the prompt, the AED disarms the charge and prompts you to start CPR.</p>
After the AED delivers the defibrillation shock: "Shock delivered."	Wait for the next prompt.
"It is now safe to touch the patient. Give CPR as instructed"	Begin CPR.



When the AED is charged, it continues to analyze the patient's heart rhythm. If the rhythm changes and a shock is no longer needed, the AED prompts, "Rhythm Changed. Shock Cancelled."

## 6: Give CPR

After the AED delivers a shock or detects a non-shockable rhythm, it enters CPR mode.

When the AED prompts...	Do this...
"If needed, perform CPR as instructed."	Perform CPR according to the prompts. Follow the countdown timer on the text display.



**Important:** If the AED is not operating as expected, it is preferable to perform CPR without the aid of the AED than to delay providing CPR.

After the CPR time expires, the AED returns to the ECG analysis mode (see 4: **Analyze the ECG** on page 2-3).

If the patient is conscious and breathing normally, leave the pads on the patient's chest and connected to the AED. Make the patient as comfortable as possible and wait for emergency medical services (EMS) personnel to arrive.

**Note:** If the AED does not provide expected CPR coaching, the rescuer must conduct CPR as appropriate.

After transferring the patient to emergency medical personnel, close the lid of the AED to end the rescue session. Prepare the AED for the next rescue.

## 7: Prepare the AED for the next rescue

1. Open the lid.



2. Optional: Retrieve the rescue data stored in the internal memory of the AED. See the *AED Manager User's Guide* for details.



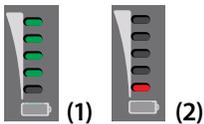
3. Connect a new preinstalled pads package (Model number XELAED001) to the AED. See the *Defibrillation Pads Instructions for Use* for details.



4. Verify that the pad connection indicator is off. If the indicator is on, make sure that the pad connector is properly attached to the AED.



5. Verify that there is adequate charge (1) remaining in the battery. If the battery charge is low (2), replace the battery.



6. Verify that the service indicator is off.



7. Close the lid.



8. Verify that the Rescue Ready indicator is green.

