4 Instructions For Use

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This section presents information about how to use the AED to perform a rescue.

Warnings and Cautions

The following cautions must be observed to prevent problems during the rescue.

**DANGER: Fire and Explosion Hazard**

Do not use in the presence of flammable gasses (including concentrated oxygen) to avoid possible explosion or fire hazard.

**WARNING: Shock Hazard**

Defibrillation shock current flowing through unwanted pathways is potentially a serious electrical shock hazard. To avoid this hazard during defibrillation abide by all of the following:
- Do not touch the patient, unless performance of CPR is indicated
- Do not touch metal objects in contact with the patient
- Keep defibrillation pads clear of other pads or metal parts in contact with patient
- Disconnect all non-defibrillator proof equipment from the patient before defibrillation
WARNING: Shock and Possible Equipment Damage
Disconnect all non-defibrillator proof equipment from the patient before defibrillation to prevent electrical shock and potential damage to the equipment.

WARNING: Electric Shock and Fire Hazard
Do not connect any telephones or unauthorized connectors to the socket on this equipment.

CAUTION: Use only Cardiac Science Approved Equipment
Using batteries, pads, cables, or optional equipment other than those approved by Cardiac Science may cause the AED to function improperly during a rescue.

CAUTION: Possible Improper AED Performance
Using pads that are damaged or expired may result in improper AED performance.

CAUTION: Serial Communication Cable
The AED will not function during a rescue when the serial communication cable is connected to its serial port. When the serial communication cable is connected to the AED during a rescue, the prompt “Remove cable to continue rescue” will be heard until you remove the serial communication cable from the AED.

CAUTION: Possible Radio Frequency (RF) Susceptibility
RF susceptibility from cellular phones, CB radios, and FM 2-way radio may cause incorrect rhythm recognition and subsequent shock advisory. When attempting a rescue using the AED, do not operate wireless radiotelephones within 1 meter of the AED – turn power OFF to the radiotelephone and other like equipment near the incident.

CAUTION: Possible Interference with Implanted Pacemaker
Therapy should not be delayed for patients with implanted pacemakers and a defibrillation attempt should be made if the patient is unconscious and not breathing. The AED has pacemaker detection and rejection, however with some pacemakers the AED may not advise a defibrillation shock.
When placing pads:
- Do not place the pads directly over an implanted device.
- Place the pad at least an inch from any implanted device.
CAUTION: Moving the Patient During a Rescue

During a rescue attempt, excessive jostling or moving of the patient may cause AEDs to improperly analyze the patient’s cardiac rhythm. Stop all motion or vibration before attempting a rescue.

Step 1: Patient Preparation

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

◆ Unresponsive
◆ Not breathing

Open the AED lid and wait until the LEDs are lit. The AED will prompt “Stay Calm. Follow these voice instructions. Make sure 911 is called now.”

The AED will prompt “Begin by Exposing the Patient’s Bare Chest and Torso. Remove or Cut Clothing if Needed.” Remove clothing from the patient’s chest. Ensure the skin site is clean and dry. Dry the patient’s chest and shave excessive hair if necessary.

Note: When the patient is a child under 8 years of age or weighs less than 55 lbs (25kg), the AED should be used with the Model 9730 Pediatric Attenuated Defibrillation Pads. Therapy should not be delayed to determine the patient’s exact age or weight. See the directions for use accompanying pediatric pads for procedure on changing adult pads to pediatric.

Step 2: Place Pads

The AED will prompt “When Patient’s Chest and Torso are Exposed, Remove Square Foil Package from Lid of AED. Tear Open Foil Package Across Dotted Line and Remove Pads.” Keep the pads connected to the AED, tear the package along the dotted line and remove the pads from the package. Leave the package attached to the pad wires.
After the prompt, “Next, Separate One of the White Pads Completely from Blue Plastic Liner. Begin Peeling from the Tabbed Corner,” with a firm, steady pull, carefully peel one pad away from the blue release liner.

Then, “Firmly Place the Pad Without the Liner on the Patient, Exactly as Illustrated. This Pad Can be Placed on Either of the Two Locations Shown.”

After the prompt “Next, Peel the Blue Plastic Liner Off of the Second White Pad. Firmly Place the Second Pad on the Opposite Location, Exactly as Illustrated,” pull the blue liner from the second pad and place in the opposite position indicated.

**Note:** Cardiac Science’s standard defibrillation pads are non-polarized and can be placed in either position as shown on the pad package.
Step 3: ECG Analysis

When the pads are placed, the AED will prompt “Do Not Touch Patient. Analyzing Heart Rhythm. Please Wait.” The AED will begin to analyze the cardiac rhythm of the patient.

If the pads become disconnected from the AED, the prompt “Make sure pad connector is plugged into AED” will be heard. If this occurs, check to be sure the connector is properly plugged into the AED. If the pads are not properly placed or become loose during the rescue, the voice prompt “Press pads firmly to patient’s bare skin” will be heard. When this occurs, ensure that pads are firmly placed on clean, dry skin.

If noise is detected during analysis, the AED will warn you with the prompt “Analysis Interrupted. Stop Patient Motion” and restart the analysis. This usually occurs if the patient is excessively jostled or there is a strong electromagnetic emitting electronic device nearby (within 5 meters). Remove the electronic device or stop the excessive motion if you hear this prompt.

Step 4: Shock Delivery

If a shock is advised, the voice prompt will say, “Preparing Shock. Move away from the patient.”

You should ensure that you and any bystanders are not touching the patient.

For the Powerheart AED G3: When the AED is ready to deliver a defibrillation shock, the Shock button will flash and the prompt “Press Red Flashing Button to Deliver Shock” will be heard. Make sure no one is touching the patient and press the Shock button to deliver a defibrillation shock. If you do not press the Shock button within 30 seconds of hearing the prompt, the AED will disarm and prompt you to start CPR.

For the Powerheart AED G3 Automatic: When the AED is ready to deliver a shock, the voice prompt, “Shock Will be Delivered in Three, Two, One” then deliver a shock. Make sure no one is touching the patient.

Both models: After the AED delivers the defibrillation shock, the voice prompt will say “Shock Delivered,” and prompt you to start 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 will issue
the prompt “Rhythm Changed. Shock Cancelled,” and prompt you to start CPR.

**Note:** During a rescue, the text screen displays voice prompts, elapsed time of rescue and number of shocks delivered.

**Step 5: CPR Mode**

The voice prompt will say, “It is now safe to touch the patient.”

The AED will then continue on with instructions for delivery of chest compressions, beginning with, “Place heel of one hand on center of chest between nipples. Place heel of other hand directly on top of first hand. Lean over patient with elbows straight. Press the patient’s chest down rapidly one-third depth of chest, then release.”

If this is not the first delivery of CPR, then the AED will prompt, “When instructed give 30 rapid compressions. Then give two breaths. Start CPR.”

At the end of the compressions, the phrase “Stop compressions” will play. The AED will then continue with the prompt, repeating “Give Breath” twice. Following this, the phrase “Continue with compressions.”

This cycle will continue until the CPR time expires. At the end of CPR, the phrase “Stop CPR” will be played. The AED will return to the ECG Analysis Mode (see **Step 3: ECG Analysis** on page 4-5).

If the patient is conscious and breathing normally, leave the pads on the patient’s chest connected to the AED. Make the patient as comfortable as possible and wait for Advanced Life Support (ALS) personnel to arrive.
Continue to follow the voice prompts until the ALS personnel arrive, or proceed as recommended by the Medical Director.

**Step 6: Post Rescue**

After transferring the patient to ALS personnel, prepare the AED for the next rescue:

1. Retrieve the rescue data stored in the internal memory of the AED by using RescueLink software installed on a PC (see detailed procedure in the Data Management section).
2. Connect a new pair of pads to the AED.
3. Close the lid.
4. Verify that the Status Indicator on the handle is green.