



# The Powerheart® family of products



AT THE HEART OF SAVING LIVES™



Dear Cardiac Science,

I just wanted to say, "Thank you very, very much," for helping me save the life of a good, long time friend of mine.

A little over 4 weeks ago I was playing morning basketball at Second Baptist Church, in Houston, with a group of guys that I've played with for years.

One of my friends (Steve) had played a few games and was sitting down. He was talking to a few of us and suddenly passed out. He was totally unresponsive and was laboring extremely hard to breathe. Within 1 minute he had completely stopped breathing and did not have a pulse. A security guard at Second Baptist Church had come into the gym area and was carrying your company's AED. The security guard started to administer CPR and I took the AED and opened it. It immediately started giving me verbal instructions on how to use it. (I have no medical or CPR training, nor have I ever used an AED device.) I tore open the packet and attached the electrodes to Steve's chest. After analyzing Steve's heart beat it determined his heart was fibrillating. Within 20-30 seconds after the shock his heart was beating at about 80 beats per minute and he had begun to breathe again. Steve woke up about 7-8 minutes later when the paramedics arrived. He was taken to the hospital immediately, and underwent triple bypass the next day. It turns out he has absolutely NO heart or brain damage. He was released from the hospital only 6 days after he arrived and is recuperating very well. His doctors are amazed and he expects a full recovery within 2-3 months!

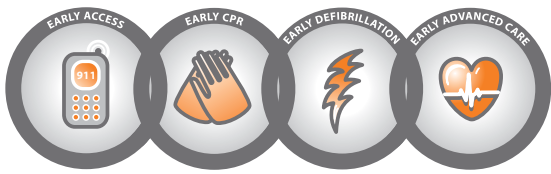
Steve's cardiologist told him that fewer than 5% of patients who have this "fatal arrhythmia" ever even survive.

WOW!!!!!! WOW!!!!!! WOW!!!!!!

I just wanted to say thank you again for making a difference. And thanks for helping me save my friend's life!

Sincerely,  
  
William Henderson  
First Investors Corporation

# When you bring AEDs to your facility, you empower teachers, employees, and/or bystanders to all become part of the chain of survival

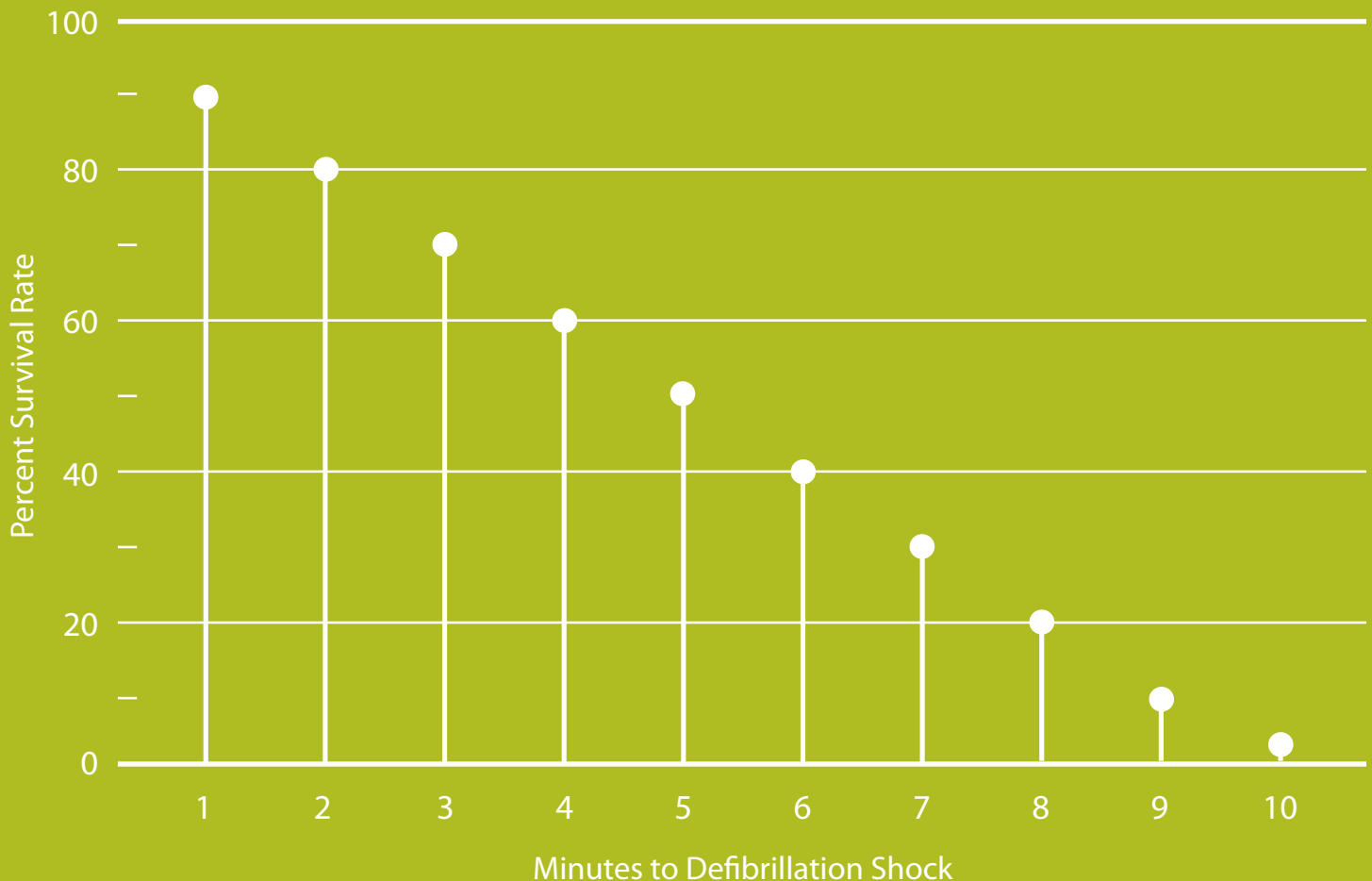


According to the American Heart Association (AHA) and European Resuscitation Council (ERC), a sudden cardiac arrest (SCA) victim requires defibrillation to stop ventricular fibrillation (VF), an often-fatal heart abnormality. The sooner the defibrillation, the better the victim's chances of survival – precisely why having your own automated external defibrillator (AED) to use while you're waiting for emergency medical responders is so important.

## Time is the critical factor

Several studies document the effects of time to defibrillation and the effects of bystander cardiopulmonary resuscitation (CPR) on survival from SCA. For every minute that passes between collapse and defibrillation, survival rates from witnessed VF SCA decrease 7 to 10 percent if no CPR is provided.

VF rarely converts spontaneously. It's ultimately a defibrillator that saves lives. Make sure you have one when it's needed.



Did you know? According to the Occupational Safety and Health Administration, 13 percent of all workplace fatalities result from sudden cardiac arrest.

## The Powerheart® family of defibrillators

# Most anyone can operate a Powerheart AED G3 Plus

In the chaos that follows SCA, concerned but untrained bystanders are scared. Do they know what to do? There's a life on the line!

We designed the Powerheart AED G3 Plus with RescueCoach™ voice prompts to talk rescuers through the steps.

- + When the rescuer applies the defibrillation pads, the G3 Plus Automatic analyzes the heart rhythm and “knows” when to deliver (or not deliver) the shock.
- + The shock is delivered automatically, with no button to push, and no human intervention. (We also make a semi-automatic version.)
- + After the shock, the unit prompts for CPR with a built-in metronome that sets the pace for proper chest compressions.

In a University of Pennsylvania simulated rescue, the Powerheart AED G3 Plus helped untrained adults deliver CPR of a quality similar to that of trained professionals.



Fifteen minutes after a Cummins Inc. employee learned how to use a Powerheart AED, he saved a colleague's life.

# Five reasons to choose a Powerheart AED G3 Plus for public access



## 1. Rescue Ready® performance sets us apart

Our patented Rescue Ready technology distinguishes us among competitors.

- + Every day, to ensure anytime functionality, the Powerheart AED self checks all main components (battery, hardware, software, and defibrillation pads).
- + Every week, the AED completes a partial charge of the high-voltage electronics.
- + Every month, the AED charges the high-voltage electronics to full energy.

If anything is amiss, the Rescue Ready status indicator on the AED handle changes from green to red and the device emits an audible alert to prompt the user to service the unit. In sum, a Powerheart AED is Rescue Ready when a life depends on it.

## 2. RescueCoach™ guides you through a rescue

Extensive prompts coach you through in a very stressful situation. We highlight a few of the prompts below.

- + *Stay calm. Follow these voice instructions. Make sure emergency services are called now!*
- + *Begin by exposing patient's bare chest and torso. Remove or cut clothing if needed.*
- + *Tear open foil package across dotted line and remove pads.*
- + *Do not touch patient, analyzing heart rhythm. Please wait.*
- + *Preparing shock. Move away from the patient.*
- + *Shock will be delivered in 3, 2, 1 – shock delivered. It is now safe to touch the patient.*
- + *Lean over patient with elbows straight. Press the patient's chest down rapidly – 1/3<sup>rd</sup> depth of chest – then release.*
- + *Start CPR. Press. Press. Press. Press....*

## 3. Helpful text screen

Text runs in tandem with the voice prompts. Especially useful for audio-challenged rescuers and in noisy environments, the screen also provides valuable rescue information to professional rescuers when they arrive on the scene.

## 4. Variable escalating energy

Our AED determines the electrical impedance (resistance level) of each patient and customizes the energy level delivered. If more than one shock is necessary, our proprietary STAR® biphasic software escalates the energy to deliver therapy at an appropriate, higher level.

## 5. One of the longest warranties in the industry

Each AED is under warranty for seven years – one of the longest in the industry. We also provide a four-year, full operational guarantee on the Intellisense® lithium battery (item 9146) used with the AED G3 and G3 Plus defibrillators.

# The Powerheart AED family of products

G3 Plus



G3 Semi Auto



G3 Auto



## Key Features

	G3 Plus	G3 Semi Auto	G3 Auto
Available worldwide		■	■
Fully automatic mode	■		■
Semi-automatic mode	■	■	
Allowable Energy Range (J)	Escalating Variable Energy (VE) 95J to 351J	Escalating Variable Energy (VE) 95J to 351J	Escalating Variable Energy (VE) 95J to 351J
RescueCoach	■		
Metronome	■		
Daily, weekly, and monthly Rescue Ready self testing	■	■	■
Pads tested for presence and functionality	■	■	■
Pediatric pad availability	■	■	■
7-year device warranty	■	■	■
4-year, full battery replacement guarantee	■	■	■
Download patient event data	■	■	■
Non-committed shock	■	■	■
Pacemaker pulse detection	■	■	■
Synchronized shock	■	■	■

## Cardiac Science in the community

Remember when fire extinguishers were optional? Soon, AED use could be just as widespread. When the community deploys AEDs, everyday citizens become part of the emergency response system, increasing the likelihood that first responders can save a life.

The United Kingdom supports the world's largest government-funded Public Access Defibrillation (PAD) program. With 2,600 Cardiac Science AEDs deployed in businesses, schools, government offices, and other public areas, survival rates improved from 5% to around 25%<sup>1</sup>. With results like these, it's no wonder Cardiac Science is committed to increase AED placements dramatically, all over the globe!

<sup>1</sup> The Department of Health National Defibrillator Programme: analysis of downloads from 250 deployments of public access defibrillators – Resuscitation 64 (2005) 269–277

## These are just some of the companies using Powerheart products

CH2M Hill

ExxonMobil

Gold's Gym

GE

Wrigley

Kraft

Amtrak

CSX Corporation

Honeywell International

The Shaw Group

Northrop Grumman

BAE Systems

City National Bank

Union Pacific

Cummins

WellPoint

Schering-Plough

Crown Cork & Seal

Norfolk Southern

Merrill Lynch

# The Powerheart AED G3 Pro® for professional responders

## Puts you in complete control

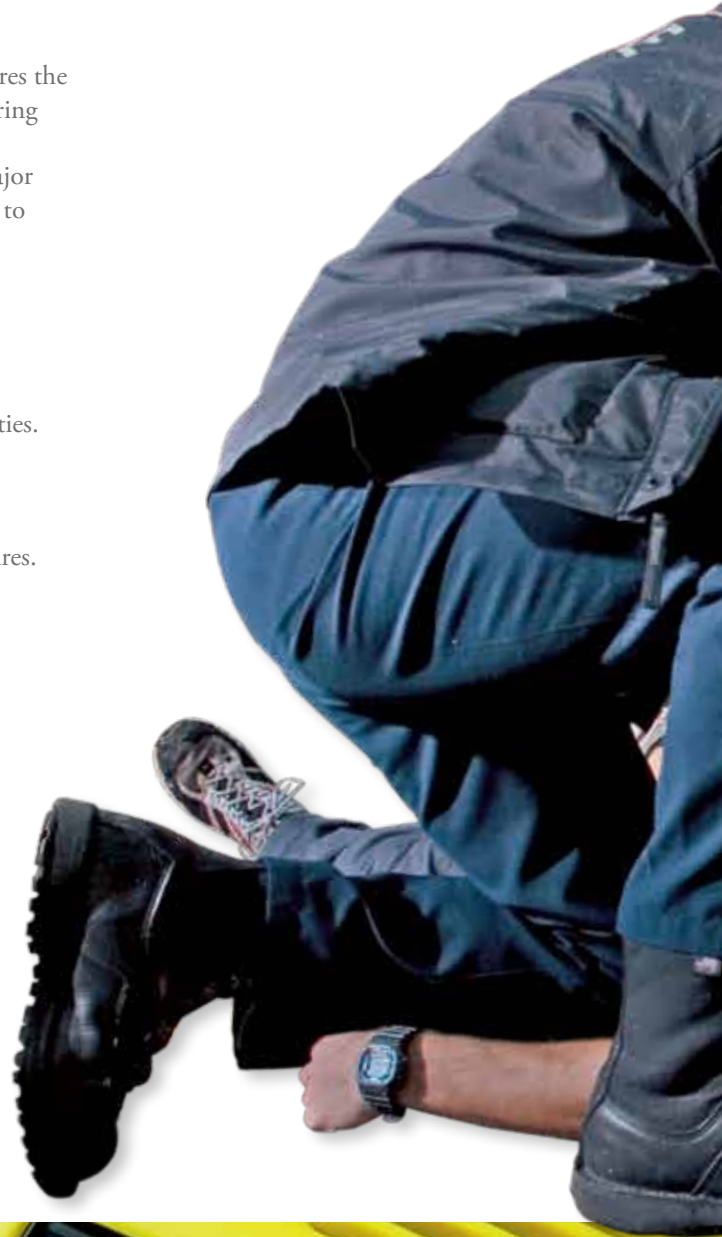
Designed for professional and medically trained responders, the G3 Pro features the industry's first color ECG display, manual override, and 3-lead ECG monitoring capabilities. With its RHYTHMx™ analysis algorithm, the G3 Pro lets first responders proactively monitor for life-threatening arrhythmias. This is a major benefit. The earlier a responder recognizes cardiac arrest, the shorter the time to defibrillation, and the better the chance for survival.

### A host of benefits

The G3 Pro comes fully equipped with:

- + Color ECG display, manual override, and 3-lead ECG monitoring capabilities.
- + Our patented Rescue Ready technology to self-test all critical components (battery, pads, and electronic systems) daily.
- + Non-committed shock, pacemaker detection, and synchronized shock features.
- + A built-in metronome (which can be switched off) to set the pace for CPR compressions.
- + Escalating STAR biphasic technology for customized patient therapy.
- + A 7-year AED warranty.

Plus, we offer rechargeable and non-rechargeable battery options. Choose the one that best fits your needs.



The easy-to-use color ECG display serves a vital role. Since the Powerheart Pro is a defibrillator and cardiac monitor in one, the emergency responder has one less thing to do – and more time to administer critical care. The display shows the patient's heart rate, the waveform, the number of shocks delivered, and the elapsed time; exactly what emergency workers need in life-and-death situations.





Designed specifically for emergency responders, the Powerheart AED G3 Pro includes semi-automatic and manual override options and the industry's first color ECG display in an AED.



I'm grateful that Cardiac Science does so much to make AEDs available in public places. Our San Diego program has been hugely successful. When citizens begin the rescue, more lives can be saved.

Maureen O'Connor  
San Diego Project Heart Beat

## Program Management\*

# A sound investment for complete peace of mind.

Purchasing AEDs gets you most of the way to rescue readiness. Program management makes up the balance.

Because AEDs are life-saving devices, federal and various state regulations require training, meticulous record keeping, and a licensed physician to oversee your program. For these tasks, our Program Management Service is a sound investment: we take care of all these requirements for you.

## Why trust Cardiac Science?

We've been doing this a long time – longer, in fact, than anyone in the industry. To date, we've implemented more than 20,000 AED programs and our 150 educators have taught more than 350,000 students. We have customers for our products and services all over the world. When you work with us, you can expect:

- + **A thorough implementation.** We come on site and determine the optimal quantity and placement for the devices. We provide project managers and a dedicated Customer Care team.
- + **Easy scheduling.** Our exclusive Automated Course Reservation system empowers your locations to sign up for their own CPR/AED courses online (other companies expect you to manage the scheduling before you call them, likely delaying things).
- + **Consistency.** We outsource nothing. We make the equipment, we educate, we record keep, and we provide medical direction. We're unaware of anyone else who offers such a comprehensive program. The benefits? Time savings for you, and consistent results among each of your geographically dispersed locations.
- + **Best-in-class training.**

*\* Call to learn which of these services are available in your market.*



## A 98 percent approval rating

Our CPR/AED training is second to none – and students give our training a 98 percent overall approval rating! We've trained thousands of corporations, law enforcement agencies, state and federal agencies, and schools.

We deliver a number of certified training programs, including those from the AHA and ECSI (Emergency Care and Safety Institute), as well as a number of ERC-compliant programs. Each student is given a manikin and CPR barrier mask to keep. And with hands-on scenario and CPR skills training, our students tell us they feel prepared to meet a medical emergency.

## Record keeping made easy

It's a good idea to have us upkeep your AED program. With our exclusive MasterTrak™ system, we:

- + Send you Eminders™ with timely prompts to monitor program equipment inventory, locations, serial numbers, and expiration dates.
- + Alert you when pads and batteries need to be replaced, responders need to be retrained, and when AED rescue events occur.
- + Store everything – including your facility contacts and training rosters – in a convenient and secure, web-based location.
- + Maintain your certification dates, employee training records, and related test scores.
- + Lastly, we offer annual inspections as a value-added service.

## Measuring success

Implementation. Scheduling. Consistency. Training. Record keeping. Customer Care. A few of the reasons Cardiac Science AED programs are so successful.

We measure success not only by the lives we helped save, but the lives *touched* by the persons we helped save. Among SCA victims in our programs, we documented a more than 50 percent survival rate in some of our programs – versus an average five percent survival rate in the US.

It's something we can feel great about.



## Want the best results?

# Count on Cardiac Science supplies

We offer premium batteries, defibrillation pads, electrodes, and related items specifically designed to keep your Powerheart AED Rescue Ready.

### AED batteries

A single, medical-grade battery powers your Powerheart AED. (Some manufacturers require the user to replace up to ten consumer batteries at a time!) One battery is better than ten: one is easier to maintain and helps ensure that your device is ready to provide professional-grade defibrillation therapy.



#### 9146

For use with the AED G3 and G3 Plus, this Intellisense lithium battery comes with a 4-year, full operational replacement guarantee.

#### 9145

For use with the AED G3 Pro, this Intellisense lithium battery comes with a 1-year (from deployment) or 12 hours (of use) full operational replacement guarantee. (whichever comes first).

#### 9144

For use with the AED G3 Pro, this rechargeable battery is ideal for frequent users. A fully charged battery delivers 60 to 100 shocks and its usable lifetime is approximately 2.5 years or 300 discharge cycles.

#### 9044

For use with the 9144 battery – quickly recharge the AED G3 Pro rechargeable Intellisense lithium battery to its full capacity.

### Defibrillation pads

Powerheart AEDs come with pre-connected adult pads that can be placed in either position on the chest (upper-right or lower-left) – to reduce confusion and save you time during a rescue.



#### 9131

Non-polarized adult defibrillation pads are intended for use with the AED G3 Plus, AED G3 Automatic, and AED G3 Semi-automatic.

#### 9660

Polarized adult defibrillation pads are intended for use with the AED G3 Pro.

#### 9730

Reduced-energy pediatric defibrillation pads are designed for infants or children up to eight years old or 55 pounds. These can be used with any Powerheart AED.

## Carry options

First and foremost, each Powerheart AED has a long handle bar that's easy to grab in a rescue situation.

We offer additional accessories, each of them rugged, durable, and designed to help you respond quickly in an emergency.

### Carry bag

Our durable, soft-sided AED carry bag protects your AED and makes it easy to grab the unit when you're in a hurry. The bag is designed to keep the Rescue Ready indicator and the pads' expiration date visible at all times.

### Hard carry case

This waterproof, hard-sided carrying case is IP57 rated and provides heavy-duty protection for storage and transport in harsh environments.

### Rescue backpack

Perfect for mobile users such as bicycle medic teams, search and rescue teams, and scout troops, this backpack securely carries an AED in an external pouch for quick access. The spacious main compartment is filled with pouches ideally suited to organize, store, and carry other essential rescue supplies.



## Storage options

We provide storage options to keep your AED secure and easily accessible during a rescue.

### Wall cabinets

We offer wall cabinets including some with alarms and strobe lights to alert you when an AED has been removed for a rescue. All of our cabinets keep the Rescue Ready indicator and the pads' expiration date visible at all times.

### Wall sleeve

An attractive yet economical way to mount your AED (in a soft carry bag) to the wall.

### Wire racks/baskets

Our wire racks/baskets mount to the wall and tightly secure your AEDs in place, providing convenient storage and easy accessibility to AEDs during a rescue.



## Other accessories

### Items to improve your performance

#### AED wall sign

A highly visible three-dimensional wall sign. It projects from the wall so rescuers can quickly locate your AEDs.

#### Ready kit

A practical kit to help responders perform a rescue. Includes gloves, razor, scissors, towel, gauze, and a CPR mask – everything you need right at your fingertips.

#### 3-lead ECG monitoring kit

An ECG kit for professional rescuers, who can view a 3-lead ECG without using the defibrillation pads.

#### Data cables

Cables that allow communication between an AED and a computer. With them, professional rescuers can quickly modify AED operational parameters, upload rescue data, and transfer critical information.

#### Total response rescue kit

When paired with your Powerheart AED, the total response rescue kit contains most everything needed in emergency situations. Respond to more than 95 percent of the most common workplace medical emergencies. It's designed to hold an emergency oxygen cylinder, a blood borne pathogens responder kit, and a first aid kit. Place it conveniently on the wall under your AED.



## The Cardiac Science AED G3 Trainer

Realistic, hands-on rescue experience is the best way to prepare. The trainer simulates different heart arrhythmias and gives students the opportunity to apply defibrillation pads, practice AED use, and perform CPR compressions on a manikin. The clear, instructive voice and metronome guide the rescuer through the save.

With the trainer, the instructor can:

- + Select among four pre-programmed rescue scenarios.
- + Simulate shockable and non-shockable rescue situations.
- + Train users to perform CPR compressions using a metronome.
- + Use a wireless remote control to vary the rescue conditions while students respond.
- + Pause the trainer in mid-scenario to emphasize an important point, and then pick up at the same point in the simulation.
- + Demonstrate automatic and semi-automatic AED operation.

Note: We offer both adult and pediatric re-useable training pads to support your AED training.





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