

PRESS INFORMATION

Revolutionary defibrillator design allows Police to save victims of sudden cardiac arrest

As a professional first responder, the public counts on the Police Service to be there for them when they need it most. Police units are often the first emergency service to attend incidents where a sudden cardiac arrest has occurred, as well as having people detained in cells who may be at a higher risk of cardiac arrest. The only effective treatment for victims is defibrillation from what is known as an AED (Automatic External Defibrillator). An AED is designed to be a rugged portable device that can administer life saving treatment by non-medical staff without risk to the victim or responder.

The Lifeline AED from Martek has recently been chosen by the New Jersey Police force for each mobile unit, totalling over 2300 units. Moreover some UK forces are currently in negotiation to fit out stations and cars with this small, rugged and simple to use life saving device.

Sudden cardiac arrest (SCA) causes the heart's normal rhythm to suddenly become chaotic. The heart can no longer pump blood effectively and the victim; collapses; stops breathing; becomes unresponsive; and has no detectable pulse. SCA can strike anyone and at anytime. Although the risk of SCA increases with age and in people with heart problems, a large percentage of the victims are people with no known risk factor. SCA is an electrical problem with the heart and should not be confused with a heart attack which is a pumping problem. Sometimes a heart attack, which may not be fatal in itself, can trigger a sudden cardiac arrest.

Defibrillation is the only treatment proven to restore a normal heart rhythm. When used on a victim of SCA, the automated external defibrillator (AED) can be used to administer a lifesaving electric shock that restores the heart's rhythm to normal. AEDs are designed to allow non-medical personnel to save lives.

If the victim receives defibrillation within three minutes the chances of survival are 70%. Every minute that the heart is not beating lowers the odds of survival by 7%. After 10 minutes, the chances of survival are negligible. CPR can buy a little time but ultimately SCA requires a shock to restore a normal rhythm.

The Lifeline AED was developed by experienced multidisciplinary engineering teams and incorporates state-of-the-art digital signal processing techniques and advanced ECG analysis algorithms.

This enables the device to exceed the European Resuscitation Council and American Heart Association performance recommendations, giving the user confidence and correct therapy is being delivered.



The Lifeline AED defibrillator uses advanced biphasic technology, including the most studied biphasic shock waveform and automatically adjusts the shock delivery to the person's individual needs.

The unit is very simple to operate and can be used by either medical or non-medical personnel. Voice prompts guide the rescuer through the steps involved in saving someone's life, including calling an ambulance and performing CPR in compliance with new 2005 Resuscitation Council guidelines. The AED is self-contained with pre-connected pads and a lit status indicator. It also features an audible alarm if an internal problem is detected when performing self-tests. A computer inside the unit analyses the patient's heart rhythm and determines if a shock is required to save the victim. If a shock is required, the AED uses voice instructions to guide the user through saving the person's life. Safeguards designed into the unit means that non-medical responders can't use the AED to administer a shock if the system determines that no shock is required.

Like all of the emergency services, budgetary constraints play a large part in the procurement of new equipment. However, the Lifeline AED provides a cost-effective solution without compromising on quality.

For ease of training there is a standalone trainer package that includes a Trainer AED, training pads, rechargeable training battery, battery charger, and remote control for ease of use. The standalone trainer is pre-programmed with the training software so no additional training software card is required. Alternatively, for those looking to make their budget stretch further, the training package consisting of a rechargeable training battery, battery charger, and training software allows a Lifeline AED to be used for training to simulate rescue scenarios without delivering a defibrillation shock.

In addition to the standard 5-year battery, the Lifeline AED is also available with an industry leading 7-year battery pack giving a standby life of 7 years, 300 defibrillation shocks, or 16 hours of continuous operating time including daily, weekly, monthly and quarterly self-tests.

The Lifeline AED is particularly well suited for the harsh conditions that are frequently encountered by first responders every day. Our defibrillators are rugged, low-maintenance, and extremely cost effective. From the built-in carrying handle designed to accommodate even a gloved hand, to the non-slip rubberised surfaces on the hardened lightweight case, the Lifeline is professional grade equipment you can count on at a price you can afford.

The Lifeline AED is technologically advanced enough to include all the critical features necessary to provide the most advanced treatment for sudden cardiac arrest, yet so simple and un-intimidating to use that even non-medical personnel can effectively save lives.



The Lifeline offers the following features & benefits:

- Active status indicator – shows unit status under all types of conditions
- Clear voice prompts – guide user step-by-step through the operation of the unit
- Pad connectors – visible pad connectors show the pads are connected
- Handle – roomy rubberised handle makes AED easy to carry even in gloves
- Big buttons – oversized & brightly lit 'power on' & 'shock' buttons mean even the most nervous hands will hit the mark
- Battery pack – Easy to replace battery pack available with industry leading 7 year life
- Overmoulding – rubberised surfaces enhance grip & ruggedness of unit
- Progress light – give user clear visual text guidance
- Complete package – Unique case design with integrated pad storage in the back means the unit is complete without lids or additional case

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