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Ouick Shock: The HeartStart Advantage

Quick Shock

Quick Shock is a unique feature offered only by Philips on HeartStart automated external defibrillators (AEDs). All HeartStart AED models can deliver a shock typically in less than 10 seconds after the end of a CPR pause. No other AED is able to do this as quickly.



CPR helps

Recent studies have revealed that CPR is even more beneficial than previously realized, particularly for longer down-time cardiac arrest patients.^{1,2}

Quick Shock maximizes the benefits of CPR

The beneficial effect of CPR disappears very rapidly once it is stopped, so time to shock after CPR is very important.³⁴ Quick Shock helps by minimizing the interruption of CPR chest compressions, thereby increasing the chance that a shock will result in a successful return to spontaneous circulation.

Peer-reviewed research supports fast shock

Two independent articles published in *Circulation* support the design intent of Quick Shock. In one article, Dr. Yu et al. concluded, "Interruptions of precordial compression for rhythm analysis that exceed 15 seconds before each shock compromise the outcome of CPR and increase the severity of post-resuscitation myocardial dysfunction."³ A second study by Dr. Eftestol et al. similarly concluded, "The interval between discontinuation of chest compressions and delivery of a shock should be kept as short as possible."⁴ Simply put, getting a shock to the heart as soon as possible after CPR can aid in the return of spontaneous circulation, potentially saving more lives.³



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Survival is closely linked to the speed of shock delivery after CPR

How does HeartStart's Quick Shock compare against other devices?

The Quick Shock feature – less than 10 seconds (typical) to deliver a shock following a CPR pause – makes HeartStart AEDs the fastest with respect to this critical measure,⁵ as shown in the graph above. The HeartStart FRx and OnSite are able to deliver a shock in 8 seconds (typical); the FR2+ is able to in 10 seconds (typical). Other technologies fall farther out on this curve, wasting the benefits of CPR. No other manufacturer's device is even close to the HeartStart FRx, OnSite or FR2+ Defibrillators.

Philips HeartStart Defibrillators

- An excellent choice

Quick Shock is one of the innovative capabilities that set Philips HeartStart Defibrillators apart. HeartStart Defibrillators are backed by more peer-reviewed research than any other defibrillator⁶ and have provided more than 5.5 billion hours of operational service to customers. Philips Medical Systems is a \$7 billion organization with over a quarter million automated external defibrillators shipped. Philips is the worldwide AED marketshare leader.⁷

References

¹ Cobb LA, Fahrenbruch CE, Walsh TR, et al. Influence of cardiopulmonary resuscitation prior to defibrillation in patients with out-of-hospital ventricular fibrillation. JAMA. 1999 Apr 7; 281(13):1182-8.

² Wik L, Hansen TB, Fylling F, et al. Delaying Defibrillation to Give Basic Cardiopulmonary Resuscitation to Patients With Out-of-Hospital Ventricular Fibrillation: A Randomized Trial. JAMA. 2003 Mar 19; 289(11):1389-95.

³ Yu T, Weil MH, Tang W. Adverse Outcomes of Interrupted Precordial Compression During Automated Defibrillation. Circulation. 2002; 106:368-372.

⁴ Effestol T, Sunde K, Steen PA. Effects of Interrupting Precordial Compressions in the Calculated Probability of Defibrillation Success During Out-of-Hospital Cardiac Arrest. Circulation. 2002;105:2270-2273.

⁵ Data on file at Philips.

⁶ Philips researchers have published twenty-one peer reviewed medical journal manuscripts on the core technology of the Philips HeartStart Defibrillators.

⁷ Frost and Sullivan, World External Defibrillator Study, 2003.

To learn more about Quick Shock or Philips HeartStart Defibrillators call **1.800.453.6860** or visit **www.philips.com/heartstart**

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