



# HeartStart 1 (HS1) Automated External Defibrillator (AED)

## Frequently asked questions



**St John**

Here for Life

**Q. Do I need to do anything to activate my AED?**

- Yes. To activate your new AED, simply pull the green tab on the back and listen to the simple voice prompts. Please note: the voice prompts will be loud so ensure you are in an appropriate environment.

**Q. How long do the batteries last?**

- *Capacity:* 200 shocks or 4 hours of operating time.
- *Shelf life:* 4 years from date of manufacture.
- *Training life:* Supports 10 hours of use in training mode.

**Q. What are the operating temperatures?**

- 0 – 50°C
- Stand by 10 – 43°C
- 0 – 95% relative humidity operating
- Stand by 10 – 75%
- Storage/shipping (with battery and pads cartridge):
  - -20° to 60° C for up to 2 days

**Q. How durable are the machines?**

- Able to be dropped from 1m height on any edge.

**Q. Do I need to service this machine?**

- Your AED has been specifically designed so it is very simple to maintain.
- The daily, weekly and monthly self-testing performed by the AED ensures its readiness for use. The AED will advise you of any maintenance actions through an audible chirp and flashing light. Should your AED advise you of a maintenance action, simply contact Laerdal on **0800 523 732** and we will be happy to assist.
- Any testing and maintenance on your AED must be carried out by a Phillips accredited service provider. There are currently two accredited service providers in New Zealand. They are Medxus and Bioserve. Maintenance, service, or repair carried out by an unaccredited provider will void your warranty.
- To ensure readiness of use we recommend periodically checking of the following:
  - Check the green Ready light. If the green Ready light is not blinking, see manual.
  - Replace any used, damaged or expired supplies and accessories.
  - Check the outside of the AED. If you see cracks or other signs of damage, contact Philips for technical support.

**Q. Can I use the data?**

- Yes the data is stored in the device. First 15 minutes of the ECG and the entire incidents events and analysis decisions.
  - Data transmission is through the infrared port to the HeartStart Event review software (available FOC on the internet).

**Q. Describe the Biphasic waveform for me?**

- Forerunner delivers shocks at 150 Joules.
- Biphasic waveform travels in two directions across the chest and back, as a consequence less energy is required to achieve successful clinical outcomes (*Bardy et al*).

**Q. What advantages does this waveform have?**

- Less energy requirements to achieve clinical efficacy (*Greene et al*).
- Less damage to the myocardium due to lower joule delivery (*Weaver et al*).
- Impedance is adjusted immediately therefore patient receives correct adjusted shock, rather than excessive unnecessary joules.

**Q. How safe is this in relation to patient rhythms?**

- The HS1 will only shock a shockable rhythm.
- Algorithm performance is measured on two parameters:
  - *Sensitivity:* ability to detect life threatening arrhythmia's
  - *Specificity:* ability to discriminate between life threatening and normal arrhythmia's.
- SFA has developed software, which provides exceptional level of specificity and sensitivity.
- Shock will only be delivered when a life threatening arrhythmia has been detected.

**Q. Can you give some examples why I should buy this product over the competitors?**

- The HS1 has a number of significant reasons which make it the ideal choice for early access defibrillation:
  - ease of use
  - reliability
  - proven experience
  - warranty (8 years).