ZOLL 1600 DEFIBRILLATOR

Compact, Lightweight, Ultra-Rugged
The ZOLL 1600 Defibrillator has a space-saving design and weighs just 14 pounds. Water resistant and rugged, it's designed for demanding EMS use in the most challenging conditions.

Large Monitor
Despite its overall size, the ZOLL 1600 has a large, bright, high-contrast CRT display. Messages are large and easy-to-read, even in bright sunlight.

Multi-Function Electrodes with Preconnect™ Feature
Multi-Function Electrodes allow hands-off defibrillation, pacing, and monitoring through a single set of pads.

Ease of Use
The controls are simple and color-coded for easy operation. All functions and controls are standardized with other ZOLL models. Training time is reduced, skill retention is improved, and potential therapy delays are minimized.

Voice and Visual Prompts
Concise voice prompts and clear CRT messages simplify training and allow the ZOLL 1600 to be used by all responders. Easily custom configured to meet individual system requirements.

PC Software Based Medical Control
ZOLL Data Control Software™ provides the ability to easily archive and review recorded event data. PDM/CIA data card and a standard computer provide this information without the need for expensive separate medical control hardware.

The ZOLL 1600 offers EMS professionals resuscitation capabilities in a lightweight unit that's rugged enough for the real world. With both semi-automatic and manual modes, the ZOLL 1600 can be used by EMTs and paramedics alike. Thanks to its unsurpassed simplicity, the 1600 is ideal for all skill levels.

The ZOLL 1600 has several features, including its innovative digital data/voice recording system that eliminates unreliable cassette tapes. Its standard memory card and serial port allow easy downloading of data to a personal computer for analysis and archiving. A strip chart recorder with Summary function provides automatic event documentation on demand.

A wide range of upgrade options—including pacing—allows you to configure the 1600 to meet your needs, now and in the future. Its simplicity, flexibility, and advanced features make the ZOLL 1600 the ultimate, no-compromise solution for EMS resuscitation.

Superior Battery Technology
Sealed, lead-acid battery technology provides high capacity, long life, and low cost. Various options provide AC/DC operation, 4 hour recharge time with PowerCharger™ and multiple battery charging and testing with the Base PowerCharger™ 4x4 Battery Charger/Tester, make this the most versatile and advanced battery operated device.

Upgradeable
Optional feature upgrades assure that a ZOLL 1600 purchased today can be easily upgraded as your system requirements change.

Manual Mode
Switches between semi-automatic and manual mode with the turn of a key. Paramedics have full ACLS capabilities when needed.

Pacing Technology
The ZOLL 1600 features ZOLL's patented pacing technology, recognized as the industry standard and proven superior in independent clinical studies.*

Annotating Recorder with Event Summary
Automatic recorder provides accurate written documentation of therapies. Summary function automatically stores a record of ECG and therapies delivered for later recall and review.

Warranty and Support
Comprehensive warranty, on-site training, and around-the-clock emergency support are included with every ZOLL 1600.

*Clinical studies are available upon request.
**Defibrillation/Pacing Electrodes**

- Standard configuration allows the use of ZOLL standard or PD-2200 Multi-Function Electrodes packaged in pairs. Can be used in the anterior/posterior or anterior/anterior positions. Sterile and pediatric electrodes available.

**Defibrillator General**

- **Waveform:** Damped sinusoid.
- **Charge Time:** Less than 10 seconds. Depleted battery packs will result in a longer defibrillator charge-time.
- **Delivered Energy:** CRT monitor displays delivered energy.

**Semi-Automatic Defibrillator**

- **Advisory:** Evaluates electrode connection and patient ECG to determine if defibrillation is required. Shockable Rhythms: Ventricular fibrillation with amplitude>150µV and wide QRS complex ventricular tachycardia with rates greater than 150 bpm.

**Manual Defibrillator**

- **Output Energy Delivered:** Automatic, preset shock 1, 2, 3 energy levels — user configurable. Selectable at 50, 100, 150, 200, 300, 360 joules.
- **Event Mark Keys:** 1, 2, 3, 4.
- **Voice Prompts:** *“Stand Clear”* *“Press Shock”* *“No Shock Advised/Check Pulse”* *“Check Patient/Press Analyze”* *“Check Electrode”* *“Memory Card Full”* *“Check Memory Card”*

**Visual Prompts:**

- **Analyze**
- **Analyzing ECG**
- **Shocked**
- **Selected**
- **Charging**
- **Press Shock**
- **Number of Shocks Delivered**
- **No Shock Advised**
- **Noisy ECG**

**Monitor and Display**

- **Patient Connection:** Via 3-lead ECG cable and electrodes. Fully defibrillator-protected. Special circuit prevents distortion of ECG by pacer pulse.
- **Input Protection:** Electrical isolation and shielding: Input protected against high-voltage defibrillator pulses and typical radio frequency interference.
- **Bandingwidth:** 5 – 35 Hz (-3dB) standard.
- **Display Format:** Nonfade, moving trace.
- **Screen Type:** High-resolution CRT display.
- **Screen Size:** 4.5 inches diagonally (56 mm x 86 mm viewing area).
- **Sweep Speed:** 25 mm/sec.
- **Viewing Time:** 3.4 seconds.
- **Display Language:** English, Japanese, French, German — user configurable.
- **Heart Rate:** Digital display on monitor 0 – 400 BPM.
- **Pacer Output Current:** Digital display on monitor 0 – 140 mA.
- **Lead Selection:** Display on monitor.
- **ECG Size:** 0.5, 1, 1.5, 2, 3 cm/mV on display monitor.
- **Alarm On/Off Status:** Digital display on monitor. User selectable.
- **ECG Lead Fault:** High (60 – 280 BPM) Low (20 – 100 BPM).
- **Pacer Electrode Fault:** Message display on monitor.
- **Defibrillator Electrode Fault:** Message display on monitor.
- **Recorder Paper Out:** Message display on monitor.
- **Low Battery Voltage:** Message display on monitor.

**Digital Memory Card**

- **Event Recording:** 14 second recording initiated by alarm conditions and defibrillator discharge.
- **Display Language:** English, Japanese, French, German — user configurable.
- **Capacity:** Up to 4 megabytes standard PCMCIA card.
- **Audio Recording:** Digitally from integral microphone.
- **Event Review:** View all event data via IBM compatible personal computer equipped with ZOLL Data Control Software.

**Defibrillation/Pacing Electrodes**

- **Type:** VVI demand, asynchronous (fixed rate) when used without ECG leads.
- **Pulse Type:** Rectilinear, constant current.
- **Pulse Duration:** 40 milliseconds.
- **Pulse Amplitude:** Variable to 140 mA.
- **Pacing Rate:** Variable from 30 to 180 PPM.
- **Output Protection:** Fully defibrillator-protected and isolated.
- **Pacer On:** Message display on monitor.