Measuring Chest Compression with Real CPR Help
The force required to depress the chest during CPR varies with the patient’s size and build. The standard measure of chest compression quality, however, is not force but depth. The Real CPR Help® technology in ZOLL’s CPR-D-padz® includes a hand-placement locator, an accelerometer, electronics, and a processing algorithm that work together to measure vertical displacement in space as each compression occurs.

One Size Fits All
ZOLL’s one-piece electrode design accounts for anatomical variation. Based on extensive human data, CPR-D-padz meet the anthropometric chest characteristics of 99% of the population. If needed, the lower (apex) electrode can be separated and adjusted to accommodate the remaining 1% of the population.

Simplified Placement
Affixing two separate electrode pads to the patient’s bare chest can be confusing to a lay rescuer. ZOLL’s CPR-D-padz simplify this step by guiding placement of the red crosshairs at the center of the imaginary line connecting the patient’s nipples. Once in place, the hand-locator and the two electrode pads fall naturally into optimal position for both defibrillation and CPR.

Five-Year Shelf Life
All AED electrodes transmit defibrillating electricity into the patient via metal in close contact with a salt-infused gel that is positioned between the metal and the skin. Over time, however, the salt in the gel will corrode the metal and eventually compromise electrode functionality. ZOLL’s novel electrode design includes a sacrificial element that prevents significant corrosion for five years, which is unmatched in the market today.
AED Plus Specifications

**Defibrillator**

AutoPace/Heartline biphasic

**Defibrillator Charge Hold Time:** 30 seconds

**Energy Selection:** Automatic programmed selection (120J, 160J, 200J)

**Patient Safety:** All patient connections are electrically isolated

**Charge Time:** Less than 10 seconds with new batteries

**Electrodes:** ZOLL CPR-D pastes, pediatric pastes II or stat padz II

**Self-test:** Configurable automatic self-test from 1 to 7 days.

**Device:**
- Size: 9.8 x 8.9 x 2.2" x 11.85 x 13.3 x 22.9 cm
- Weight: 6 lbs, 3.1 kg
- Power: User Replaceable batteries
- 10 Type 123A Photo Flash Lithium manganese dioxide batteries

**CPR-D-padz**
- Shelf Life: 5 years
- Conductive Gel: Polymeric Hydrogel
- Conduction Electric Element: Tin
- Cable Length: 48" (1.2 m)
- Stun Amperage: 6: 1 in (15.5 cm) Width: 6: 1 in (15.5 cm) Length, conductive gel: 3.5 in (8.9 cm)
- Weight, conductive gel: 3.5 in (8.9 cm)
- Apex Amperage: 6: 1 in (15.5 cm) Width: 6: 1 in (15.5 cm) Length, conductive gel: 3.5 in (8.9 cm)
- Weight, conductive gel: 3.5 in (8.9 cm)

**Complete Assembly:**
- Folded Length: 7.8" (19.4 cm) Folded width: 7.0" (17.8 cm) Folded height: 1.5" (3.8 cm)

**Design Standards:**
- Monts applicable requirements of UL 2001, AAMI DR-39, IEC 60601-1-2, K0000081-1, B800001-1-2

**Environmental Specifications:**
- Operating Temperature: 32° to 122° F, 0° to 50°C
- Storage Temperature: -22° to 140° F, -30° to 60°C
- Humidity: 10 to 95% relative humidity, non-condensing
- Vibration: MIL Std 81F, Mil-Helicopter Test
- Shock: IEC 68-2-7, 10G
- Altitude: 300 to 15,000 ft, 91 m to 4573 m
- Data Recording and Storage: 50 minutes of ECG and CPR data. If audio recording option is installed and enabled, 20 minutes of audio recording, ECG, and CPR data. If audio recording is disabled, 7 hours of ECG and CPR data.

**Software:**
- Microprocessor hardware and microcontroller software, CPR circuitry and CPR-D sensor, and audio circuitry
- CPR Data Recording and Storage: 50 minutes of ECG and CPR data. If audio recording option is installed and enabled, 20 minutes of audio recording, ECG, and CPR data. If audio recording is disabled, 7 hours of ECG and CPR data.

**Automatic Self-Test Checks:**
- Battery capacity, electrode connection, electrocardiogram and charged/charge circuits, microprocessor hardware and software, CPR circuitry and CPR-D sensor, and audio circuitry
- PC Minimum Requirements:
  - Waveform: 16 bit Audio Recording
  - Display: 12.3" x 9.5" x 6.2" (31.2 x 24.1 x 15.8 cm)

**Data Recording and Storage:**
- 20 minutes continuous monitoring. End of lifetechnically designated by the C or I typical remaining minutes: 85!

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