



cardiolife AED
AED-2150

Save a life with Cardiolife AED

Effective emergency cardio care is only possible with an easy-to-use and rapid defibrillation system. With its intuitive design and voice instruction, Nihon Kohden's Cardiolife AED-2150 automated external defibrillator (AED) simplifies and quickens the delivery of defibrillation, which can be used by professionals as well as by the first responders in an emergency situation.

Apart from easy to follow voice instructions, Cardiolife AED-2150 offers additional graphical instructions on a display screen, which is critical in noisy environments. It also features the option of an ECG waveform display on the screen and ECG analysis on demand for professional staff.

The Cardiolife AED-2150 can be used for both adults and children with the same pads since the shock energy can be reduced by switching to child mode. The daily and monthly self-tests make sure the device is ready to use, while the status can easily be controlled via the status indicator thus ensuring peace of mind.



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Simple and fast

- Once the AED is turned on, the lid opens automatically and simple voice instructions begin.
- AED pads are pre-connected and there is no need to distinguish right from left. Just remove the backing and press the pads on the patient's chest.
- Analysis begins automatically in instruction mode when the pads are attached.
- After the analysis of the ECG, the AED indicates if defibrillation is needed with audio instructions: simply push the blinking button to deliver the shock to the patient, thus ensuring no risk of unnecessary shock to the patient.
- The Cardioline AED-2150 also allows for manual ECG-analysis. When it is used by medically trained staff in EMS mode, the operator can decide the timing for the ECG analysis by pushing the analysis button for viewing the ECG waveform on the Cardioline AED's LCD display screen. ECG can be viewed once the pads are attached.
- The Nihon Kohden total VF/VT Analysis Algorithm analyses the ECG waveform, thus, ensuring highly accurate and safe defibrillation.

Biphasic defibrillation

The Cardioline AED-2150 provides defibrillation with the aid of a lower energy, biphasic impulse curve. It requires less energy than traditional monophasic defibrillation and therefore protects the heart muscle.

- It uses a particular T-circuit – **ActiBiphasic technology** – which offers an improvement over most conventional biphasic circuit concepts.
- The Nihon Kohden T-circuit actively controls the shape of the curve in the second phase of the shock impulse, thereby providing a constant impulse curve.

For adult and pediatric patients

- The Cardioline AED-2150 can be used for both adult and pediatric patients without changing the pads.
- The energy switch allows defibrillating pediatric patients by simply switching to the defibrillator's child mode to deliver less energy.

Memory function

- The Cardioline AED-2150 collects and saves the data on resuscitation (ECG and event information) for 90 minutes to review the data on PC for diagnosis.
- The device's daily self-tests, monthly self-tests, and other tests can be saved and read for maintenance activities.

AED self-test

- Simple status indicator reflects AED condition.
- Each day (at midday) the Cardioline AED-2150 tests itself in order to monitor the functionality of the device, battery, and electrodes.
- The test results can then be displayed in the form of a red/ green status indicator (green = fully operational) that is clearly visible without needing to open the device.

Durable and compact

- Cardioline AED-2150 has wide range of operating temperatures from 0 °C to 50 °C.
- It has a compact body which weighs only 2.8 kg including battery and pads, thus making it easy to carry to an emergency site.

Bluetooth interface

The saved data and the test results can be wirelessly transmitted to a PC via a Bluetooth interface, where they can be conveniently displayed and analyzed using the AED transcription software.

Specifications

AED 2150/2151/2152

Defibrillator

Operation	Semi-Automatic (shock-advisory)
Waveform	Truncated exponential constant power biphasic (ActiBiphasic)
Output energy range	50, 70,100,150, 200J (at 50 ohm)
Output energy sequence	150J-200J-200J for adult mode, 50J-70J-70J for child mode
Charging time to 200J from starting analysis	Less than 8 seconds (when using new battery)
Charging time to 200J from end of CPR	Less than 8 seconds (when using new battery)
Automatic internal discharge	The charged energy is internally discharged when any of the following occurs: <ul style="list-style-type: none">- 30 seconds passes after the SHOCK BUTTON starts blinking- A pad is disconnected from the AED or patient- The power is turned off- Non-shockable waveform appears- Battery is removed
Defibrillation pads	ANSI/AAMI DF-80:2003 Adhesive, disposable defibrillation pads
Impedance range	15 to 175 ohm (for biphasic waveform)

Battery pack (SB-214VK)

Output voltage	27V DC/ 3V DC Non-rechargeable
Operation life (standby)	4 years
Expiration date	6 years from manufacturing date
Number of times for charging	More than 140 times (with a fully charged new battery pack at a temperature 20 degrees)
Battery options	Rechargeable battery pack (SB-220V), 2 years battery pack (SB-212VK)

Self-test

Daily test, monthly test, when the power is turned on, when the power is off, when the battery is set, and if abnormality is detected in self-test, status indicator turns red with alarm.

Data storage

Total storage	90 minutes
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Indicators

Status indicator	Green (OK) or Red (needs to be checked)
Shock button	Flashes when shock is available
Pads check indicator	Lights up in following cases: when pads are not connected AED, when the term of pads expires, when pads are not meant for this AED model
Battery remaining indicator	Yes
Child mode lamp	Lights up when the adult/child mode switch is set to child mode
Service indicator	Lights up when AED is faulty

Dimensions and weight Display

LCD display	3"
Dimensions	100 (W) x 265 (H) x 320 (D) mm
Weight	2.8 kg including battery (SB-214VK) and pads

Environment

Operating and installation conditions

(with battery installed and power off):

Temperature	0 to +50 °C
Humidity	5 to 95 % (relative humidity, non-condensing)
Atmospheric pressure	570 to 1030 hPa
Shipment, transport, and storage conditions	<i>Temperature: -30 to +65 °C</i> <i>Humidity: 5 to 95 % (relative humidity)</i> <i>Atmospheric pressure: 570 to 1030 hPa</i>



Improving Healthcare with Advanced Technology



NIHON KOHDEN EUROPE GmbH
Raiffeisenstr. 10, 61191 Rosbach, Germany
Phone: +49 (0) 6003 827-0, Fax: +49 (0) 6003 827-599
Internet: www.nihonkohden.com, E-mail: info@nke.de



NIHON KOHDEN CORPORATION
1-31-4 Nishiochiai, Shinjuku-ku, Tokyo 161-8560, Japan
Phone: +81 (3) 59 96-80 36, Fax: +81 (3) 59 96-81 00
Internet: www.nihonkohden.com