# IT'S NOT HEART TO BE SAFE

**Updated January 2022** 





**Public Access Defibrillator** 





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# **WHY PUBLIC ACCESS DEFIBRILLATION?**

Sudden cardiac arrest (SCA) can strike any person, anywhere, anytime. When someone collapses from SCA, immediate defibrillation and cardiopulmonary resuscitation (CPR) are essential for any chance of recovery. Immediate treatment is critical for SCA victims since survival chances decrease by about 10% with every minute without defibrillation.

Authorities agree that defibrillation should be provided as early as possible, preferably within first 3 to 5 minutes. Even with the fastest emergency medical service system, the professionals may not be able to reach the victim on time.

This results in the necessity of the lifesaving defibrillation to be delivered directly on the site of emergency within first minutes and by any responder.

# **POSSIBLE FOR EVERYBODY - EVERYWHERE!**

CardiAid is designed to make lifesaving defibrillation possible for everybody - accessible everywhere!

CardiAid Automated External Defibrillator (AED) is specially designed for public-access use, to provide life-saving defibrillation within the critical first minutes, until the professional care is available

- CardiAid AED can be used by any first aid rescuer to save a sudden cardiac arrest victim. It guides the user with clear verbal and visual instructions throughout the process, including CPR assistance with metronomic signals for maximum efficiency.
- CardiAid AED is completely safe to use. Electroshock cannot be delivered unless it is indicated as necessary by the device.
- It provides the most effective treatment with its leading detection algorithm and current-based biphasic defibrillation technology.
- CardiAid AED is in accordance with the ILCOR 2015 ERC Resuscitation Guidelines.
- CardiAid AED is an innovative life-saving device which stands as a critical element for public AED programs, schools, sports centres, occupational safety & health practices, emergency response teams and maritime safety solutions. It also meets the needs of professionals such as emergency medical services (EMS) personnel, physicians and dentists; whose profession



# DISTINGUISHING FEATURES OF CARDIAID AED

CardiAid AED is designed to be easy to use and quick to treat.



- CardiAid automatically switches on by simply opening the cover.
- Pre-connected electrodes help save time and make the process simpler for the user.
- "Status indicator lights" provide easy interpretation of the self-test results.
- CardiAid guides the user step by step with a combination of clear voice instructions, illustrations and lights for the maximum efficiency. All steps are ensured to be applied accurately even if the responder has limited knowledge or experience.
- CardiAid works with one-button only\* the shock button. No on-off button, no time loss!

- CardiAid combines an accurate ECG detection algorithm with high sensitivity and specificity values with its current-based defibrillation technology for the most effective treatment.
- Paediatric treatment is available with special paediatric electrodes.
- CardiAid automatically activates paediatric mode when the special paediatric electrodes are plugged in.
- Any inessential function is omitted to make CardiAid perfect for public access defibrillation. No ECG display, no distraction!

# FACTS:

# **EASILY ADAPTABLE**

CardiAid is easily adaptable to future changes in resuscitation guidelines with configurable functions like voice prompts, CPR duration, CPR sequence (30:2 or hands-only); and chest compression frequency (100 to 120 bpm)





- CardiAid is ready for any unpredictable situation with high battery capacity to support up to 200 shocks/20 hours of monitoring.
- CardiAid stores the ECG and incident data with the highest capacity in industry: up to 4 events with a total duration of 3 hours.
- To minimize the responsibility of the owner and risk of forgetting to charge the battery, CardiAid does not use rechargeable battery.
- CardiAid supports more than 35 language options.
- Event and ECG data can be obtained easily through Bluetooth.

- CardiAid is easily adaptable to future changes in resuscitation guidelines with configurable functions like voice prompts, CPR duration, CPR sequence (30:2 or hands-only); and chest compression frequency (100 to 120 bpm).
- Ready to communicate with the Cardilink® portal enabling to send data in real-time.
- CardiLink® software displays the status of your devices in a dashboard in real-time and analyzes your data for long term monitoring and quality reports. CardiLink® provides a solution for all needs: Uptime Guarantee, Fleet Management, GPS Tracking, emergency notifications, event monitoring and more...

# **CARDIAID**

# **PUBLIC ACCESS**

# **DEFIBRILLATOR**

CardiAid CT0207RS
Semi-automatic AED and
CardiAid CT0207RF
Fully automatic AED

The well-known quality and design with even more features





- Paediatric treatment possible using paediatric electrodes
- Auto-recognition of paediatric mode when special electrodes are plugged in
- Accurate ECG detection algorithm with high sensitivity and specificity
- Current-based defibrillation technology for the most effective treatment
- Improved illustrations and verbal instructions
- Recording multi-events up to 3 hours
- More than 35 language options
- CardiAid AED is in accordance with the ILCOR 2020 ERC Resuscitation Guidelines
- Easily adaptable to future changes in resuscitation guidelines with configurable functions like voice prompts, CPR duration, CPR sequence (30:2 or compressionsonly); and chest compression frequency (100 to 120 bpm)
- Ready to communicate with the Cardilink® portal enabling to send data in real-time
- CardiLink® software displays the status of your devices in a dashboard in real-time and analyzes your data for long term monitoring and quality reports. CardiLink® provides a solution for all needs: Uptime Guarantee, Fleet Management, GPS Tracking, emergency notifications, event monitoring and more...



# HOW TO USE CARDIAID

## When you see a person lying unconscious:

- Make sure you, the victim and any bystanders are safe
- Check the victim for a response. Gently shake the shoulders and ask loudly: "Are you all right?"

# If he responds:

- Leave him in the position in which you find him, provided there is no further danger
- Try to find out what is wrong with him and get help if needed
- Reassess him regularly

# **IF HE DOES NOT RESPOND:**SHOUT FOR HELP AND FOLLOW THESE STEPS:





Turn the victim onto his back. Open the airway by tilting his head back and lifting his chin up. Look, listen and feel for breathing



If breating is absent or not normal, send someone for help and to bring the AED. Perform CPR until the AED arrives



If you are on your own, use your mobile phone to alert the ambulance services



CardiAid switches on automatically when the cover of the device is opened. Follow the verbal and visual instructions



Open patient's chest. If necessary, use the scissors in the emergency kit of CardiAid to cut the cloth of the patient



Open electrodes' package



Peel off the film of one electrode and place the pad on patient's bare chest as shown on the pad



Peel off the film of the second electrode and place the pad on patient's bare chest as shown on the pad



CardiAid immediately starts analysing the heart rhythm. Do not touch the patient from now on



If electroshock is required, CardiAid informs the user and prepares the shock automatically. In CTO207RS, electroshock is delivered by pressing the button. In CTO207RF, the device delivers the shock automatically after warning the user



CardiAid continues to guide the user through the resuscitation process. First make 30 chest compressions by following the verbal instructions. CardiAid provides a metronomic signal with the correct rhythm for the chest compressions



After 30 chest compressions, give 2 mouth-to-mouth breaths. Continue CPR by following the instructions of CardiAid until "Do not touch the patient from now on." instruction is heard

# **TECHNICAL SPECIFICATIONS**

CardiAid CT0207RS / CardiAid CT0207RF



\* Measured with a new battery pack, 20°C. Values can vary within a non-significant tolerance and are dependent upon storage and environmental conditions, frequency of use, pre-configured settings and the shelf life of the product.

\*\* The algorithm and the board of CardiAid CT0207 AED offer the optimum combination of sensitivity and specificity. (Published in "Automated analysis of electrical signals of the human body for detecting of life threatening cardiac abnormalities", Igor Tchoudovski,

Mensch and Buch Verlag, ISBN 3-89820-984-9, Pg 141)

Cardia International, at its own discretion, reserves the right to make changes pertaining to the technical features and the accessories of the device

Cardia International, under no condition, shall be liable for any fault of spelling and/or writing in any and all instructive and informational data, documents, images given above and any direct, indirect, accidental, secondary legal or penal loss or damages may



#### **Defibrillation System**

#### Operating Mode:

Automated (CT0207RS: one button operation / CT0207RF: full-automatic)

Wave Form: Biphasic, current-based

#### Energy Delivery:

Adjusted to patient impedance, Programmable (factory settings)

#### Delivered Energy - Adult Mode:

170J (Average for  $50 \Omega$  at low energy level) 270J (Average for  $50 \Omega$  at high energy level)

#### Delivered Energy - Paediatric Mode:

50J (Average for  $50 \Omega$  at low energy level) 75J (Average for  $50 \Omega$  at high energy level)

#### **Shock Sequence:**

Constant or escalating, Programmable (factory settings)

#### Charging Time:

Typically <10 seconds\*, maximum <15 seconds\*

# **ECG Analysis System**

**Analysis Time:** Typically < 10 seconds\*

Derivation: ||

Asystole Threshold: <0,160 mV Specificity NSR / Asystole: >95\*\* Sensitivity VF / pVT: >90\*\*

#### Reaction to Implanted Pacemaker:

Normal cardiac pacemaker rhythms are not detected as shockable

#### Movement Detection:

Checks signal quality, gives acoustic warning at patient movement

## Operation

#### Operating Elements:

i) Automatic switch-on when the cover is opened

ii) Flashing shock button (one-button operation for CT0207RS, full-automatic operation for CT0207RF)

iii) Info-button

#### Info Mode:

Announcement of the elapsed time and number of shocks since device started, when info-button is pressed

#### Display Elements:

Self-explanatory illuminated symbols (traffic light principle). Device status indicator symbols (for self-test result)

#### **Defibrillation Electrodes**

#### Range of Application:

Adult electrodes for patients >8 years / 25kg Paediatric electrodes for patients 1-8 years / <25kg

#### Delivery Status:

Disposable, self-adhesive, single-use electrodes; ready-to-use, sealed and packed with connector outside pouch

#### Polarization:

Not polarized (Exchange acceptable)

#### Active Surface Area:

200 cm<sup>2</sup> (adult), 80 cm<sup>2</sup> (paediatric)

Cable Length: 130 cm

**Shelf Life:** 36 months from the manufacturing date (adult)

## Data Management

#### **Event Documentation:**

Automatic recording of ECG and event data in internal memory up to 4 sessions with a total maximum duration of 2 hours 50 minutes

#### Data Transfer:

Bluetooth (only for authorized service providers)

#### **Event Review and Device Programming:**

Via Bluetooth connection to PC with CardiAid Monitor Software (only for authorized service providers)

#### **Self-Test**

#### Schedule:

Automatic; daily, monthly and when device is opened

**Timing:** Programmable (factory setting) **Scope:** Battery, electronics, software, charging

# Energy Source\*

Type: Alkaline

Capacity: Up to 210 shocks

 $\textbf{Monitoring Capacity:} \ \mathsf{Up} \ \mathsf{to} \ \mathsf{20} \ \mathsf{hours}$ 

**Stand-by Period:** 42 Months

#### **Environmental Conditions**

#### Operation:

i) Temperature: 0°C to +50°C

ii) Humidity: 0-95%

iii) Air Pressure: 572-1060h/PA

#### Storage and Transport:

i) Temperature: 0°C to +50°C

ii) Temperature: -20°C to +70°C (max 2 weeks, without battery & electrodes)

ii) Humidity: 0-95%

iii) Air Pressure: 500-1060h/PA

#### **Standards**

Device Class: IIb (93/42/EEC)

Resuscitation Protocol: ERC, ILCOR 2020

**Norms:** IEC 60601-2-4:2010 **EMC:** EN 60601-1-2: 2015

Free Drop: IEC 60601-1:2005+A1: 2012

Protection Class: IEC 529: IP55 (protected against dust

and water jets)

# Dimensions and Weight\*

Dimensions: 301 x 304 x 112mm

**Weight:** 3,0 kg (including battery and electrodes)





# THE STORIES: LIVES SAVED WITH CARDIAID AED

Thanks to immediate defibrillation of CardiAid and effective CPR, more sudden cardiac arrest victims are saved each day; young or old, men or women, in many places such as fitness clubs, swimming pool, supermarkets, and even on the street!



#### CardiAid saved life at the beach!

#### The Netherlands

A German tourist collapsed at the beach club renting CardiAid AED for more than a year and was rescued with CardiAid. Two shocks were given to bring him back to stable position.

#### CardiAid saved life at the office!

#### Turkey

The company doctor detected that a 59 – year old engineer with a complaint of a heavy pain on his heart is having heart crisis and then suddenly the patient had cardiac arrest in the health room of the company. He was so lucky working in a company equipped with CardiAid at the health room, and the doctor used CardiAid and saved him with one successful shock.

#### CardiAid saved life of a taxi driver!

#### Czech Republic

A 57-year-old taxi driver collapsed while he was driving. A policeman from Ricany City Police used CardiAid in the police car to save the victim. With a successful shock the man was brought back to life.

#### CardiAid saved life at a party!

#### The Netherlands

CardiAid was used to save a cardiac arrest victim at a party venue. During an anniversary party, one of the people dancing on the dance floor suddenly fell down. Luckily, the bystanders immediately started CPR and the venue staff were agile to bring the CardiAid AED which had been purchased only 3 weeks before the incident; "the best purchase ever" as stated by them.

## CardiAid saved life in a superstore!

#### The Netherlands

Immediate CPR from bystanders and the successful treatment of CardiAid saved a 68-year-old person who had sudden cardiac arrest while he was shopping in a consumer electronics superstore.

# CardiAid saved life in a sailing club!

#### Denmark

A 77-year-old sudden cardiac arrest victim was saved by the successful defibrillation of CardiAid at the sailing club. He is reported to be healthy and was discharged from the hospital a few days later.

# CardiAid saved life in a neighbourhood!

#### reland

In Ireland, a 70-year-old man had a sudden cardiac arrest while he was at home with his son. When he suddenly collapsed, his son called for help. A neighbour brought CardiAid AED which was installed in an outdoor cabinet in the community. With one successful shock, the patient was brought back to life. In a short time, the paramedics arrived and took over the case.

#### CardiAid saved life on the road!

#### pain

In Spain, when a police car went to intervene in a car accident, a policeman realized that the driver was having sudden cardiac arrest, which also caused the accident. He immediately took out the CardiAid AED which was installed in the police car and saved the driver.

# CardiAid saved life at a swimming pool!

#### Spain

CardiAid was used successfully to save the life of a 39-year-old sudden cardiac arrest victim in a swimming pool complex. When the lifeguard noticed that the man was unconscious, he asked the staff to bring the CardiAid AED and immediately started CPR. The patient was brought back to life thanks to the successful defibrillation of CardiAid AED and immediate CPR.

# CardiAid saved life of a teenage runner on the street!

#### The Netherlands

A 14-year-old victim who suddenly collapsed on the street during the running event of his school was saved by the immediate defibrillation of CardiAid AED.

#### CardiAid saved life in a medical clinic!

#### New Zealand

A 42-year-old sudden cardiac arrest victim was saved by the successful defibrillation of CardiAid in the resuscitation room of a medical clinic.

## CardiAid saved life in a sports club!

#### Denmark

A 53-year-old man was saved by one successful shock of CardiAid, in a sports club. He was reported to be in a stable condition and left the hospital a few days later.

# CardiAid saved life at a supermarket!

#### France

The customer, who was shopping at one of the supermarkets belonging to a super market chain in France, suddenly collapsed. He was revived after the successful intervention of CardiAid AED.

# CardiAid saved life in a sports club!

#### France

CardiAid was used successfully in a sports club to restore the normal heart beat of a person who suffered from sudden cardiac arrest.

## CardiAid saved life at a gym!

#### The Netherlands

A 28-year-old man suffered from sudden cardiac arrest during his daily workout at a fitness centre. With one successful shock administered by CardiAid AED, he was brought to life.

## CardiAid saved life in a supermarket!

#### France

A man at an advanced age had a heart attack while he was shopping at one of the supermarkets belonging to a supermarket chain in France. The security officers of the supermarket intervened with the CardiAid AED installed at the supermarket and saved the cardiac arrest victim.

## CardiAid saved life at a grocery store!

#### Denmark

A 60-year-old man shopping at a grocery store in Denmark suffered from sudden cardiac arrest. He was saved by CardiAid which was located at the dental clinic across the street

#### CardiAid saved life at a tennis club!

#### The Netherlands

A 62-year-old man who suddenly lost conscious while playing tennis was saved with the successful electroshock of CardiAid AED which was installed at the tennis club.

# CardiAid saved life at a supermarket car park!

#### France

The security guard of a supermarket saved a customer using CardiAid. The person was headed to his car in the car park when he suddenly fell. A security guard grabbed CardiAid which was in the store and saved his life. He was conscious again when the ambulance arrived.

## CardiAid saved life at a football pitch!

#### The Netherlands

CardiAid saved a 38-year-old man who had sudden cardiac arrest during an amateur football tournament between companies. When he suddenly fell, a colleague started CPR and a bystander ran to grab CardiAid which was located in a farm nearby. With one successful shock, he was brought back to life.

J) A 14-year-old victim who suddenly collapsed on the street during the running event of his school was saved by immediate defibrillation of CardiAid AED.

# REFERENCES OF CARDIAID

# PUBLIC ACCESS DEFIBRILLATOR

The CardiAid AED has been designed for public use!



# CardiAid Equipped Vehicles

| • | TAM Linhas Airlines            | - | Brasil        |
|---|--------------------------------|---|---------------|
| • | GOL Linhas Airlines            | - | Brasil        |
| • | Jet Time Airlines              | = | Denmark       |
| • | PT. Kereta Api, Train          | = | Indonesia     |
| • | Atlantic Airways               | = | Faroe Islands |
| • | Chemfleet, Vessel Fleet        | = | Turkey        |
| • | Panorama Langkawi<br>Cable Car | = | Malaysia      |
| • | Air Enka                       | - | Turkey        |

# CardiAid Equipped Sports Clubs

| • | Arsenal Football Club     | - | U.K.     |
|---|---------------------------|---|----------|
| • | Besiktas Football Club    | - | Turkey   |
| • | Trabzonspor Football Club | - | Turkey   |
| • | Besiktas Basketball Club  | - | Turkey   |
| • | National Basketball Team  | - | Slovenia |
| • | National Basketball Team  | - | Turkey   |

# CardiAid Equipped Hotels

| • | Ibis Hotel Chain          | - | U.K.      |
|---|---------------------------|---|-----------|
| • | Amstel Hotel              | - | Holland   |
| • | Hilton Dublin             | - | Ireland   |
| • | Hotel Sofitel Casablanca  | - | Morocco   |
| • | Medina Palms              | - | Kenya     |
| • | Puri Kiic Golf View Hotel | - | Indonesia |
| • | Hotel Mercure Golf Seilh  | - | France    |
| • | Holiday Inn Topkapı       | - | Turkey    |
| • | Val Thorens               | - | France    |

# CardiAid Equipped Shopping Malls

| • | IKEA                                  | - | Spain    |
|---|---------------------------------------|---|----------|
| • | Lidl Supermarkets                     | = | France   |
| • | Media Markt                           | - | Holland  |
| • | Secon Square Shopping<br>Mall Bangkok | - | Thailand |
| • | E. Leclerc                            | - | France   |
| • | Royal Ahold<br>Supermarkets NV        | - | Holland  |

# **CardiAid Equipped Corporates**

| • | Abdi Ibrahim Pharmaceutical        | - | Turkey         |
|---|------------------------------------|---|----------------|
| • | Adidas                             | - | France         |
| • | Henkel                             | - | Ireland        |
| • | Aircelle Maroc                     | - | Morocco        |
| • | Alstom Grid                        | - | Turkey         |
| • | Assan Aluminyum                    | - | Turkey         |
| • | Bel Group (La Vache)               | - | Turkey         |
| • | Bosch                              | - | Turkey         |
| • | BP Petrol                          | - | Turkey         |
| • | Brinkers                           | - | Holland        |
| • | Carmignac                          | - | France         |
| • | Covidien                           | - | Turkey         |
| • | Croon                              | - | Holland        |
| • | Cummins                            | - | Turkey         |
| • | Danish Stock Exchange              | - | Denmark        |
| • | Deloitte                           | - | Denmark        |
| • | Dr. Oetker                         | - | France         |
| • | DSV Global Transport and Logistics | - | France         |
| • | Emerson Electric                   | = | Thailand       |
| • | Enka                               | - | Turkey         |
| • | Royal Greenland                    | - | Greenland      |
| • | Rabobank                           | - | Holland        |
| • | Acıbadem Insurance                 | - | Turkey         |
| • | Agro Delta                         | - | Holland        |
| • | Air Products                       | - | Holland        |
| • | Akzo Nobel                         | - | France         |
| • | Alvac                              | - | Denmark        |
| • | Axa France                         | - | Morocco        |
| • | Borgers                            | = | Czech Republic |
| • | Bossa                              | - | Turkey         |
| • | BRF Brasil Foods                   | - | Brasil         |
| • | Cargill                            | = | France         |
| • | Caterpillar                        | - | Turkey         |
| • | C-Power                            | = | Belgium        |
| • | Crown Bevcan                       | - | Turkey         |
| • | Daedalus                           | - | Holland        |
| • | Dell Computer                      | = | Turkey         |
| • | Demag Cranes                       | - | U.K.           |
| • | Draka Comteq                       | - | Holland        |
| • | Emerson                            | - | India          |
| • | Enerjisa                           | = | Turkey         |
| • | Mont Blanc                         | - | France         |

| • | Eti Group                | - | Turkey    |
|---|--------------------------|---|-----------|
| • | Eurofit                  | - | France    |
| • | FCC Environment          | - | U.K.      |
| • | Solmed Alliance          | - | Spain     |
| • | GE Indonesia             | - | Indonesia |
| • | Geberit                  | - | Holland   |
| • | GFI                      | - | France    |
| • | Grimme                   | - | France    |
| • | Habets                   | - | Holland   |
| • | Harsco                   | - | India     |
| • | Heimburger (Grand' Mere) | - | France    |
| • | Herder                   | - | Holland   |
| • | Hi-Tec Sports            | - | Holland   |
| • | Indesit                  | - | Turkey    |
| • | Inditex Group            | - | Spain     |
| • | Kersten Europe           | - | Holland   |
| • | La Poste                 | - | France    |
| • | Lafarge                  | - | France    |
| • | Loreal                   | - | France    |
| • | Lukoil                   | - | Turkey    |
| • | Maltha                   | - | Turkey    |
| • | Marsa Maroc              | - | Morocco   |
| • | Mead Johnson Nutrition   | - | Thailand  |
| • | Monsanto                 | - | France    |
| • | HOLCIM (Cement Ind.)     | - | Indonesia |
| • | SKF Logistics Services   | - | Belgium   |
|   |                          |   |           |

and many more...

For more local referencesplease contactCardiAid CH



# Distribution

# **MSTRC Medical**

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