corpuls®

FOCUS – ON – PATIENTS

corpuls®

SOS

Perform chest compressions

corpuls aed

corpuls aed

corpuls aed

MANOEUVRABLE, ROBUST AND INTUITIVE

The **corpuls aed** is the first device in the **corpuls rescue chain**. With precise pictograms and voice instructions, the **corpuls aed** guides professionals and laypersons alike through an optimal and guideline-compliant resuscitation. Depending on the equipment variant, as a fully or semi-automatic device, the **corpuls aed** comes with an integrated emergency call option. With this, an emergency call can be placed early on via the **corpuls aed** and so, e.g. a dispatcher at the emergency control centre can guide the caller through a resuscitation.

With its low weight and compact dimensions, the **corpuls aed** is the ideal addition to any emergency pack. The long stand-by time of up to 5 years (depending on settings) and the automatic selftests guarantee safe usage at any time.

corpuls aed:
The **corpuls** among AEDs.

More information on the **corpuls aed**
can be found on our product site:
www.corpuls.world/produkte/corpuls-aed

corpuls

primeCPR feedbacksensor

Simple pictograms

Emergency call key with
hands-free function (optional)

Backlit colour display

All-around shock protection
of the device

Vehicle bracket according
to EN 1789

Status display

corPatch easy therapy electrodes
for adults and children

Multilingual

Stick electrodes firmly on
patients bare chest

corpuls aed

Shock key
(only in semi-automatic device)

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FEATURES

</div>

- **Emergency call function** with up to three stored, customisable emergency numbers (T-CPR)
- **Central monitoring:** Sending the device status via WLAN or SMS
- **Multilingual:** In addition to the default device language, two other languages selectable
- **Connectivity:** Simply switch the plug of **corPatch easy electrodes** from one **corpuls** defibrillator to the other
- **Display of parameters** (HR, CPR rate) and **curves** or **pictograms**

▶ The **corPatch easy** electrodes can easily be plugged into the **corpuls3** when the rescue service arrives.

corpuls aed

SIMPLE HANDLING

In a resuscitation, every second counts. Seconds can decide between life and death.

Intuitive use and simple handling of the AED are of vital importance. Therefore, we have focussed on that in particular when developing the **corpuls aed** and even equipped it with two modes: One mode for the layperson and one for a professional user.

Optional modes for laypersons and professionals

For professionals, shorter voice instructions can be configured. The display of curves and therarpy parameters is also possible.

For optimal patient treatment by laypersons, the **corpuls aed** supports their efforts with pictograms- and voice instructions. In addition, the heart rhythm analysis starts automatically every 2 minutes to guarantee a guideline-compliant resuscitation.

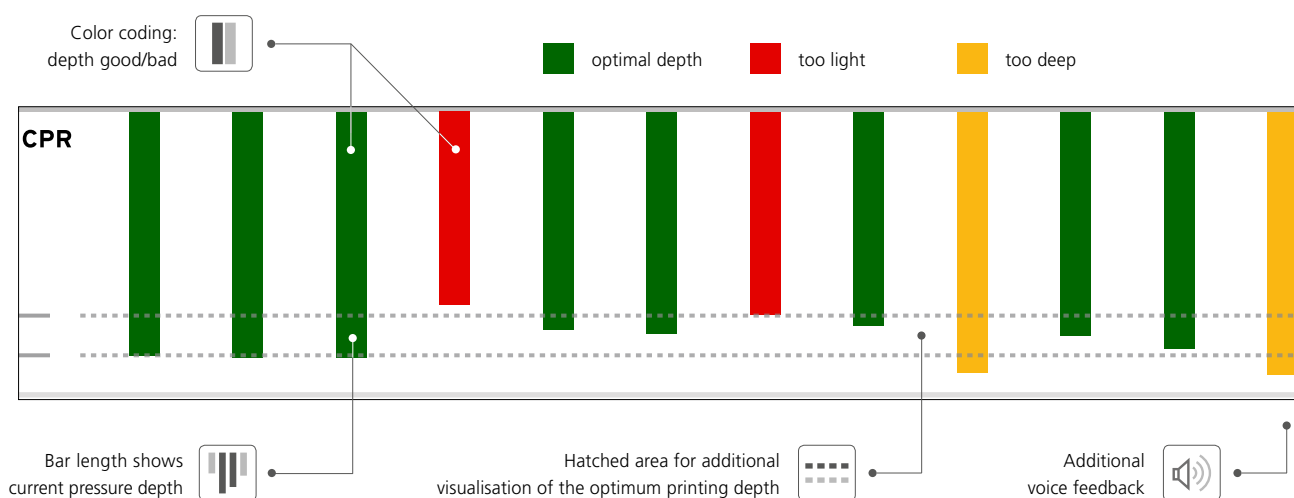▶ The **primeCPR easy** *feedbacksensor can be attached within a few seconds.*

▼ *Basic measures by first responders increase the survival rate in a circulatory arrest by double to triple*
Source: M. Holmberg et al.: Effect of bystander cardiopulmonary resuscitation in out-of-hospital cardiac arrest patients in Sweden

primeCPR FEEDBACK

To increase the resuscitation quality, the **corpuls aed** is equipped with a CPR feedback function. For that, the **primeCPR easy** sensor is attached to the lower part of the sternum and measures compression rate and compression depth during resuscitation. The quality of these compressions is displayed on the dis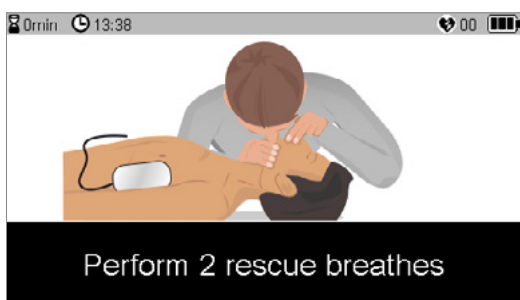play (depending on configuration, with bar diagram) and constantly adjusted by voice instructions.[1] The bar diagram shows the compression depth and the quality of the cardiac massage.

This view can be configured in the semi-automatic variant and supports the rescuer with guidance and feedback.[2]
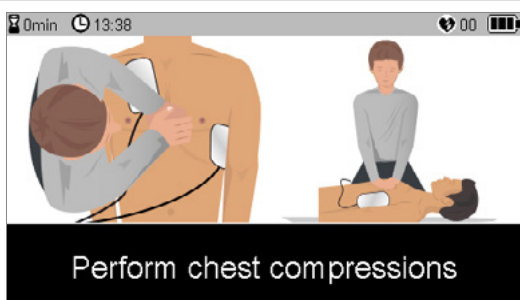
Color coding: depth good/bad

optimal depth   too light   too deep

CPR

Bar length shows current pressure depth

Hatched area for additional visualisation of the optimum printing depth

Additional voice feedback

▲ *The bar chart is used for easy visual monitoring of the optimum depth and frequency of chest compressions.*
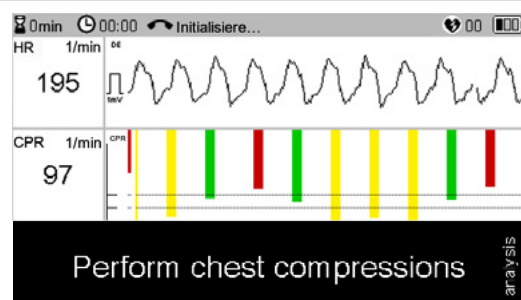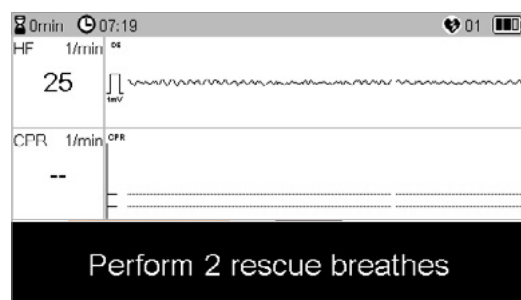
USE BY LAYPERSONS

Normal mode

Perform 2 rescue breathes

CPR Feedback

Perform chest compressions

PROFESSIONALS

Perform 2 rescue breathes

Perform chest compressions

[1] Source: F. Lakomek et al.: Real-time feedback improves chest compression quality in out-of-hospital cardiac arrest: A prospective cohort study

*[2] *Only when using the **primeCPR easy** feedbacksensor*

READY FOR USE – WHENEVER NEEDED

Weather resistant

Due to its high protection class IP66, the **corpuls aed** can be used in all weather conditions.

5 years stand-by

Thanks to its long-life battery, the corp**uls aed** has up to 5 years stand-by time with factory settings. In this time the device performs regulat selftests and checks its internal systems and functions.

Operational readiness

The user can check the operational readiness of the device at one glance, thanks to the information in the middle of the display.

Multilingual

In addition to the pre-configured device language, up to two further languages can be selected.
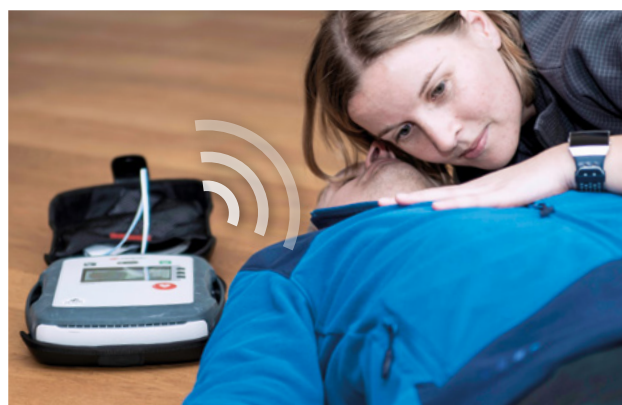The user can change between languages when starting the device, but also during therapy.

Central monitoring

Monitor individual devices or the entire fleet easily with one tool: **corpuls.manager ADMIN**

Emergency call button with hands-free function

Optionally, the **corpuls aed** is available with an integrated emergency call button for fast, competent help. Further information on this from page 8.

▶ *Easy support by live help via the hands-free function*

▼ *Emergency services worldwide trust in **corpuls** devices.*

WITHOUT EMERGENCY CALL

Semi-automatic

- Ideal for trained personnel as, e.g. in ambulances, first responders or in hospitals
- Manual shock release
- Optional display of pictograms or curves
- Language packs as needed
- Optional with CPR feedback*

Fully automatic

- AED for laypersons – Simply switch on and follow the in-structions issued by the device
- Automatic shock release
- Optimal for deployment in public spaces
- Language packs as needed
- Simple pictograms
- Optional with CPR feedback*

- AED for laypersons – Simply switch on and follow the in-structions issued by the device
- Automatic shock release
- Optimal for deployment in public spaces
- Pre-configured language
- Simple pictograms
- Optional with CPR feedback*

WITH EMERGENCY CALL

- Ideal for trained personnel as, e.g. in ambulances, first responders or in hospitals
- Manual shock release
- Optional display of pictograms or curves
- Language packs as needed
- Up to 3 emergency numbers
- Optional with CPR feedback*

- AED for laypersons – Simply switch on and follow the in-structions issued by the device
- Automatic shock release
- Optimal for deployment in public spaces
- Pre-configured language
- Simple pictograms
- Up to 3 emergency numbers
- Optional with CPR feedback*

▲ *corpuls* offers different configurations of the *corpuls aed*. With this, several possible application areas and scenarios are taken into account.

*only in combination with **primeCPR easy** feedbacksensor

corpuls aed

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SAFETY DUE TO
TELEPHONE RESUSCITATION (T-CPR)

The survival rate of a patient suffering from sudden cardiac arrest increases many times over, if witnesses at the emergency site start immediately with resuscitation measures.

It has been demonstrated that first responders are more inclined to perform resuscitation measures if a dispatcher at the emergency control centre gives laypersons clear instructions via phone and guides them through the resuscitation (T-CPR).

In a scientific investigation of T-CPR, the number of resuscitations performed by laypersons increased by 12%.* Therefore, T-CPR ensures quicker first aid care of the patient and markedly decreases the therapy-free time.

For this reason, the **corpuls aed** is optionally available with a GSM module and hands-free function. Up to three emergency numbers can be stored in the device.

* (L. Avalli et al: New treatment bundles improve survival in Out of Hospital Cardiac Arrest patients: a historical comparison)

🔊 **Dispatcher:**

"You're doing a great job!
Just keep up the compressions.
Have you attached the electrodes on the chest as pictured?"

SPECIFICATIONS

- **GSM function** optional with up to three stored, customisable emergency numbers
- **M2M card**: Optional ex works M2M SIM card for the GSM emergency call function in most European countries
- **Language selection** simply by pressing a button
- **Voice instructions** loud and clear

SMART

During the phone connection, the volume of the voice instructions is decrease, so that the instructions given by the dispatcher are clearly understandable.

Professional rescuers can use the emergency call function to alert further emercency personnel or to give a report on the situation.

▶ *A dispatcher at the emergency control centre guides laypersons through resusciation via phone*

▶ *Resuscitation by laypersons until the rescue service arrives*

AED AND ACCESSORIES
FROM A SINGLE SOURCE

You want an all-round carefree package?
corpuls offers in addition to the different device variants of the **corpuls aed** a comprehensive concept of devices and suitable combinations of equipment – no matter if for laypersons or in a professional environment.

BACKTRAY ELECTRODE COMPARTMENT

The compartment for storing **corPatch easy** therapy electrodes and the **primeCPR** feedbacksensor can be attached at the rear side of the **corpuls aed**.

DEVICE BAG

The rugged device bag protects the **corpuls aed**. The lid with magnet lock can be easily accessed in an emergency situation and has enough space for the corPatch easy therapy electrodes and a **primeCPR** feedbacksensor. The device status can be checked with one glance through the little window.

BRACKETS

AEDs are usually mounted at public places, in companies or in rescue vehicles for easy access. For this, there is a selection of different mounting options that can be used with or without the protective bag.

▲ *Depending on the bracket, the **corpuls aed** can be mounted with or without the bag.*

corpuls®

Multifunctional
device bag

Inner pocket for
accessories

Pocket fpr **corPatch easy-**
therapy electrodes

Viewport for checking
the device

Connection for
primeCPR easy feedbacksensor

corpuls aed

THERAPY ELECTRODES „PRE-CONNECTED"
The sealed **corPatch easy** therapy electrodes are already connected to the **corpuls aed**.
So, the user can focus on positioning the therapy electrodes correctly and precious time is saved. The electrodes are compatible with all **corpuls** defibrillators and are available for adults as well as children.

primeCPR easy FEEDBACKSENSOR
The **primeCPR easy** feedbacksensor is available for the **corpuls aed** as a disposable sensor. It is connected to the device via an intermediate cable and measures frequency and depth of chest compressions during resuscitation.

EMERGENCY BACKPACK WITH AED COMPARTMENT
In the compact backpack the **corpuls aed** and emergency equipment can be transported. The AED compartment can be accessed very quickly. In addition, the bag has enough space for all the medical supplies that first responders need to perform life-saving measures.

◀ *Emergency Daypack:*
Emergency backpack for quick
*access to the **corpuls aed***

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corpuls.manager

DEVICE MANAGEMENT – MADE EASY

With **corpuls.manager** ADMIN all corpuls **aed** devices can be managed remotely without manual access being required. After the regular selftests, the devices automatically establish a connection to **corpuls.manager** ADMIN. The software is available in three variations:

BASIC

With the "Basic" variation, the devices are connected to a central service by corpuls - so if a problem arises (e.g. the therapy electrodes are about to expire), the operator will be notified immediately by e-mail.

DEFAULT

With the "Standard" variation, a dashboard is also available in a web browser that shows the status and configuration of the individual devices. Selftest and operating data are displayed

as well as the status of the batteries, if the therapy electrode need to be changed or the next technical safety check. E-mail notifications can be customised. In addition, further details, such as location data can be stored.

PREMIUM

With the "Premium" variation, long maintenance phases or service appointments through software updates are a thing of the past. Every software update, language package or configuration change can be sent via WLAN to all, individual or selected devices with just the push of one button. Of course, all your data is always securely encrypted.

Status-SMS & Selftest

Software Updates & Mission Upload

corpuls.manager

corpuls.manager ADMIN Mission Data & Configuration

E-mail Notifications

SPECIFICATIONS

- Central monitoring of the entire device fleet via WLAN and SMS
- **Status- and selftest reports** for every device
- Transfer of **updates/language packages** to any number of **corpuls aed** devices over-the-air via WLAN
- **Transfer of configuration profiles** to freely definable device groups
- **Notification by e-mail** in case of device events

- **Administration of mission data –** optionally with automatic transmission to **corpuls.manager** ANALYSE

VARIATIONS of corpuls.MANAGER ADMIN

Basic: Simple, quick e-Mail notifications

Standard: additional status dashboard, view of the configuration and access to missions

Premium: additional fully automatic updates (via WLAN)

Device status **OK**
Battery level **85%**
Electrode type: **Adult**
Expiry date: **30.09.2028**
Installed software version: **F**

▶ *If no WLAN network is available, selftest results can be sent via SMS.*

SMS STATUS MONITORING –
ALWAYS AND EVERYWHERE

The **corpuls aed c**an sent its status to **corpuls.manager ADMIN.** This is usually done by WLAN connection. In areas without WLAN coverage the status SMS complements the comprehensive monitoring of the **corpuls aed**. For this, all relevant information, such as remaining battery charge, expiry date of the **corPatch easy** therapy electrodes or selftest results are transferred to **corpuls.manager ADMIN**.

These information can optimise the work process of service technicians or the operators of the devices. If necessary, they can obtain a new battery or therapy electrodes in a timely manner.

This function is available for all device variations, also for those without Emergency call button. You can obtain the necessary SIM card for this function directly from corpuls.

corpuls aed

corpuls.manager APP

THE APP FOR YOUR AED

The corpuls.manager App connects easily to the **corpuls aed** via WLAN. Settings and parameters can be adjusted on the device very quickly.
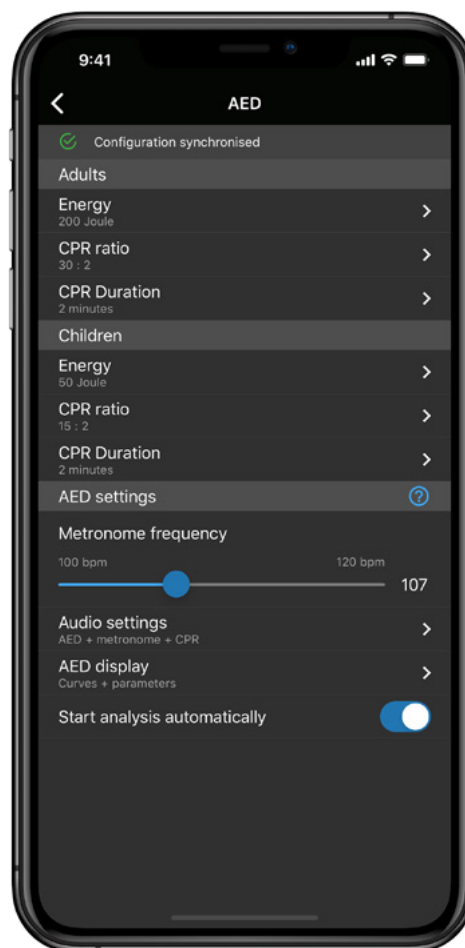
Three password-protected user levels

User, Operator and Service – allow different users exactly the configuration options they need. You need an update, another language setting or want to check the software version? The **corpuls aed** can be adapted perfectly to the indivdual deployment purpose.

Export of mission data

With the App, mission data from the **corpuls aed** can be easily exported and uploaded to a server. Then, these data can be analysed with **corpuls.manager REVIEW** and are available for documentation- and quality management purposes.

To download the **corpuls.manager App**:

▶ *Fast and easy configuration on site.*

SPECIFICATIONS

- **System check & status reports**
- **Configuration of parameters**
  Adjust energy, mode, automation etc.
  (including loading and saving a configuration)
- **Install updates and language packs**
  The required files are available via the app
  and do not have to be downloaded in the browser.
- **Upload of missions** to a server, also to
  corpuls.manager ANALYSE

SPECIFICATIONS

GENERAL SPECIFICATIONS:

- **Colour display** 4.3"
  with LED backlighting

- **Weight**: 1.9 kg
  (basic configuration, incl. battery)

- **Dimensions**:
  25,5 cm (H) × 21,0 cm (W) × 5,8 cm (D),
  without accessory bag or
  Electrode compartment

- **Protection class IP66 –**
  Dustproof and protected against
  strong water jets
  - Outdoor placement possible
  - Simple cleaning
  - Optimal for placement at
    humid/dusty locations

- **Language selection** in AED mode
  (up to 3 languages)
  - Ideal for public spaces
    (airport, train station, etc.)
  - Language switch during
    AED mission possible

- **Vibration- and shockproof**
  according to EN1789

OPERATING PARAMETERS:

- **Operating temperature:**
  – 10 °C to + 55 °C
  CPR only mode – 20 °C to + 55 °C

- **Battery running time**: 5 years
  stand-by time at factory settings

- **Battery life:**
  with full charge> 200 shocks
  at 200 J possible

- **Deployment time AED mode**
  (Standard mode 30:2): 4h 50m

- **Deployment time CPR only mode**:
  15 hours

- **ECG analysis**:
  Sensitivity 99.26 % for ventricular
  fibrillation. Specificity 98.05 % with
  non-shockable rhythms

- **Metronome rate**:
  Between 100 and 120 beats
  (Configurable)

- **Duration from switch-on to
  energy release**: < 15 seconds

COMPATIBILITY:

- **Electrodes** compatible with all
  corpuls defibrillators

- **Wall mount EN1789 approved –**
  suitable for mounting in
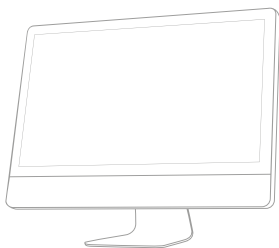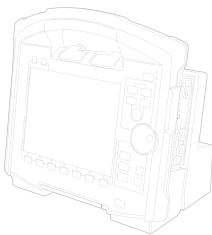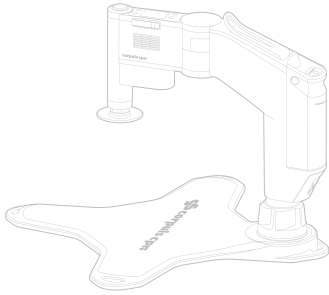 rescue vehicles

primeCPR FEEDBACK[1]

- **Disposable sensor**
- **Measures** (WxHxD):
  8,5 cm x 6,0 cm x 1,8 cm
- **Weight**: 80 g

DATA TRANSMISSION:

- **Status transmission via SMS
  or WLAN**[2]
  Devices that are not connected via
  WLAN send their battery-, therapy
  electrode- and functionality
  status as coded SMS – This applies
  for devices with and without
  GSM module.

[1] only in combination with **primeCPR feedbacksensor**   [2] only by **corpuls.manager**

For more than 40 years, **corpuls®** has developed and produced innovative high-end equipment for emergency and intensive care medicine. Today, in our headquarters in Kaufering, over 450 hearts each beat around 60,000 times every work day while aspiring to meet the high standards of rescue workers from over 70 countries around the world.

corpuls-defibrillators, patient monitoring systems and chest compression devices have set the standard since day one in the realisation of the most advanced insights in medical science, as well as in terms of innovation and ergonomics. Complemented by smart telemedicine and data analysis across devices, the **corpuls system** guarantees reliable and safe help in the fight for human lives.

corpuls®

WWW.CORPULS.WORLD