

## BeneHeart D3

Defibrillator/Monitor

# More than a fast defibrillator



# 4-in-1 design and powerful function for full spectrum applications

With a 4-in-1 integrated design (manual defibrillation, AED, pacing, and monitoring modes), BeneHeart D3 puts any unexpected circumstances under your control.

## Manual Defibrillation

Asynchronised defibrillation mode for cardioversion of ventricular fibrillation. Synchronised defibrillation mode for cardioversion of atrial fibrillation.

## AED

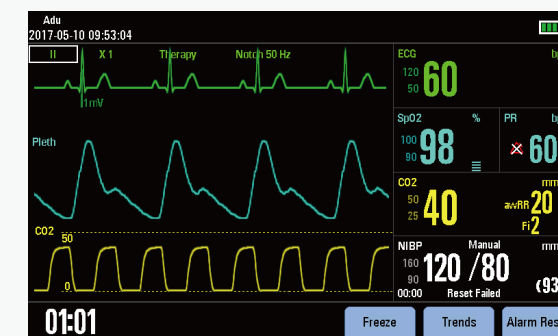
In AED mode, BeneHeart D3 automatically analyses the rhythm and determines whether a shock is necessary. Voice and text prompts guide the user through the process. Voice recording(180 minutes) is also available for after-case analysis and review.

## Monitoring

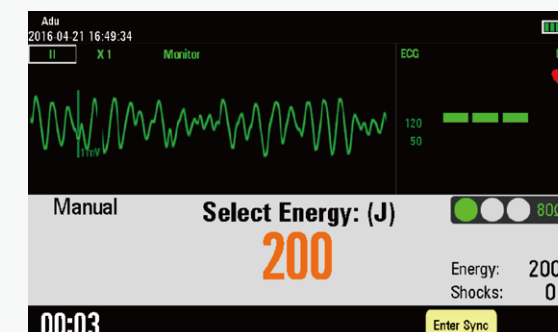
Diagnostic quality, 3/5 lead ECG monitoring with respiration, NIBP, SpO<sub>2</sub> and EtCO<sub>2</sub>.

## Non-invasive pacing

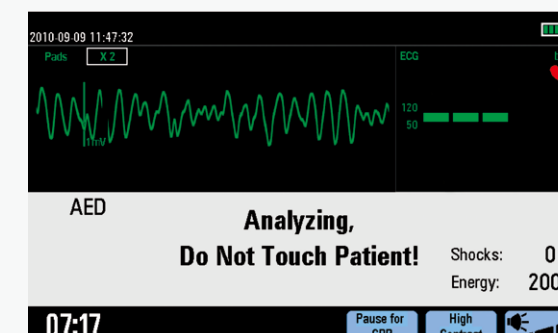
BeneHeart D3 offers external pacing in demand mode and fixed mode with adjustable rates and output. The 4:1 key enables clinicians to quickly select 1/4 of the defined pacer rate for observation of the patient's underlying rhythm.



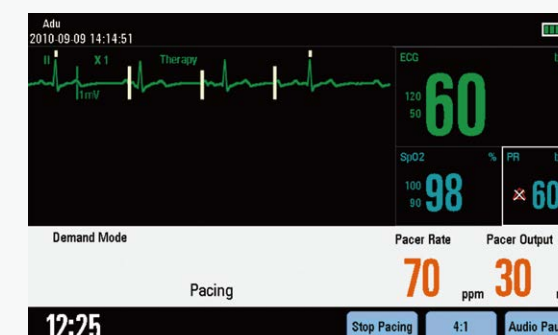
Monitoring



Manual Defibrillation



AED



Non-invasive pacing



# Fast defibrillation

## The fastest defibrillator

Mindray strives for constant innovation to improve the clinical aspects of product performance. The new generation of technology platform enables Mindray to improve the performance of the BeneHeart D3 defibrillator to meet changing clinician needs.

BeneHeart D3 gives you a greater chance of success for those patients suffering cardiac arrest. It only takes 7.5 seconds to complete the whole defibrillation operation. Studies show that when a patient suffers cardiac arrest, success rates for defibrillation drop for every second between CPR and defibrillation shock. Every second counts for cardiac arrest patients.\*

\*Edelson DP, Abella BS, Kramer-Johansen J, et al. Effects of compression depth and pre-shock pauses predict defibrillation failure during cardiac arrest. Resuscitation. 2006 Nov;71(2):137-45.



### Power on in 2 seconds

Ultra fast power on due to our unique low-power dissipation sleep technology delivers more confidence for clinicians to handle any emergency situation.



### Charge to shock in 3 seconds

Our improved battery performance and energy control system delivers charge to 200J and shock in only 3 seconds, allowing clinicians to focus on patients rather than the device.



### ECG recovery in only 2.5 seconds

Our new DC Coupling Technology delivers rapid ECG recovery, meaning clinicians can evaluate the effectiveness of defibrillation and diagnose the patients condition immediately.



### Manual defibrillation with clear 1-2-3 steps

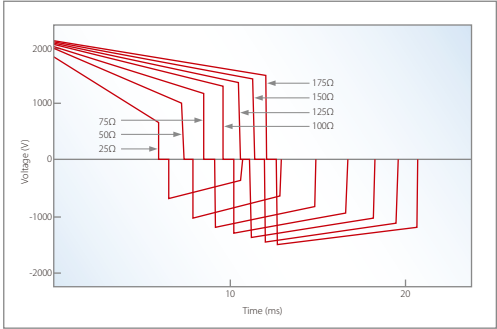
1. Select Energy
2. Charge
3. Shock

### External Paddles with function buttons

Buttons for energy selection, charging and shock delivery improve usability for clinicians.

# 360J high energy

BeneHeart D3 defibrillator/monitor features 360J biphasic technology, which increases the chance to save difficult-to-defibrillate patients. Studies have shown that cardiac arrest is common among ventricular fibrillation (VF) patients and that defibrillation of recurring episodes of VF is increasingly difficult. A randomised controlled clinical trial shows the rate of VF termination increases with charge energy, when charge energy is 200J and above.\*

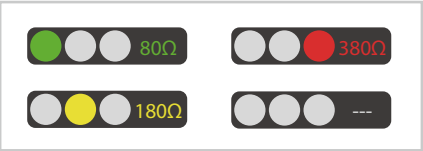


When impedance is adjusted, voltage and energy delivery cycle are adjusted automatically to correspond with impedance

\*Stiell I, Walker R, Nesbitt L, et al. Biphasic Trial: A randomized comparison of fixed lower versus escalating higher energy levels for defibrillation in out-of-hospital cardiac arrest. Circulation. 2007;115:1511-1517.

## Intuitive contact impedance indicator

Colour coded indicator with real contact impedance value provides a more intuitive guide to clinicians.



## Adult/Paediatric mode

When changing from adult to paediatric mode, the default shock energy, monitoring range and parameter alarm limits change automatically to deliver the best treatment effect for both types of patients.



## Effective IT solution

Our simple yet effective IT solution manages all the information from BeneHeart D3 defibrillator/monitors to avoid manual recording and so improve efficiency and reduce the workload of clinical staff. All information can be databased. A simple yet robust network connection following standard information infrastructure in most hospitals: Transmit data through 5G/2.4G WiFi, international standard IHE HL7 protocol and DHCP to obtain IP address automatically.

