DEXUP Mechanical CPR Device (MCPR) – FAQ

1. General Overview

Q1. What is the DEXUP Mechanical CPR (MCPR) device?

The DEXUP MCPR is an automated CPR solution that delivers reliable, high-quality chest compressions during cardiac arrest, improving effectiveness and reducing manual effort.

Q2. What is the primary clinical objective of this device?

The device is designed to:

- Deliver uniform and guideline-compliant chest compressions
- Minimize interruptions during CPR
- Reduce physical strain on healthcare providers
- Improve overall resuscitation outcomes

Q3. In what environments can the DEXUP MCPR device be deployed?

The device is suitable for a wide range of emergency response environments, including:

- Hospitals (ICU, Emergency Departments, Operation Theaters)
- Ambulances and pre-hospital emergency care units
- Corporate offices and large workplaces with occupational health programs
- Public infrastructure such as airports, railway stations, and metro stations
- Industrial facilities and high-risk work zones
- Disaster response and mass casualty management scenarios

Its portability and rapid deployment capability make it highly effective in both medical and non-medical emergency settings.

2. Features & Functional Capabilities

Q4. What are the key operational features of the device?

- Automated, high-quality chest compressions
- One-button rapid activation system
- Compact and ergonomically optimized design
- Intelligent chest height detection
- Multiple compression modes
- Controlled and gradual compression initiation

- Simplified and intuitive user interface

Q5. How does the device ensure consistency in CPR delivery?

The system uses automated mechanical actuation to maintain:

- Consistent compression depth
- Stable compression rate
- Reduced variability compared to manual CPR

Q6. What is meant by “automated chest height detection”?

This feature enables the device to automatically assess the patient’s chest dimensions and adjust compression depth accordingly, ensuring optimal performance across different body types within the supported range.

Q7. What compression modes are supported?

The device supports:

- Continuous compression mode
- 30:2 compression-to-ventilation ratio
- 15:2 compression-to-ventilation ratio

These modes align with standard resuscitation protocols.

Q8. What is the benefit of gradual compression initiation?

Gradual initiation ensures that compressions begin progressively rather than abruptly, helping:

- Reduce the risk of injury
- Improve mechanical adaptation to the patient’s chest

3. Technical Specifications & Performance

Q9. What is the model and classification of the device?

- Model: **DEXUP MCPR**
- Device Type: Mechanical CPR System

Q10. What are the electrical input requirements?

- Operating Voltage: 100–240V AC
- Frequency: 50/60 Hz
- Power Consumption: 180 VA

Q11. What are the battery performance parameters?

- Battery Voltage: 24V
- Capacity: 4500 mAh
- Operating Time: Up to 120 minutes (continuous use)

Q12. What are the charger output specifications?

- Output Voltage: 24V
- Output Current: 3A

Q13. What are the device dimensions and weight?

- Dimensions: 65 cm (Height) × 54 cm (Width)
- Net Weight: 8.5 kg

This ensures portability without compromising structural stability.

Q14. What level of environmental protection does the device offer?

- IP Rating: IPX3 (excluding charger)

This indicates protection against light water spray, making it suitable for emergency environments.

4. Patient Applicability

Q15. What patient size range is supported by the device?

- Sternum Height: 17.5 cm to 29 cm
- Chest Width: Up to 48 cm

Q16. Is the device suitable for pediatric use?

No. The device is not recommended for pediatric patients due to dimensional and safety limitations.

Q17. Can the device be used for bariatric (obese) patients?

Use is not recommended in cases of extreme obesity due to potential challenges in positioning and compression effectiveness.

5. Contraindications & Safety Considerations

Q18. What are the major contraindications for using the device?

The device should not be used in patients with:

- Severe chest trauma or deformities
- Flail chest
- Open chest wounds
- Significant thoracic injuries

Q19. Is the device safe for post-surgical cardiac or thoracic patients?

No. Use may lead to:

- Surgical wound disruption
- Bleeding complications
- Compromise of surgical repairs

Q20. Can it be used in patients with implanted cardiac or thoracic devices?

Caution is advised due to the risk of:

- Device displacement
- Functional interference

Clinical evaluation is recommended prior to use.

Q21. What precautions are required for pregnant patients?

Use requires modified positioning due to the risk of inferior vena cava compression. Clinical judgment is essential.

. Clinical & Operational Advantages

Q22. What are the primary advantages of the DEXUP MCPR device?

- Ensures consistent, guideline-compliant compressions
- Significantly reduces rescuer fatigue
- Enhances operational efficiency during resuscitation
- Enables continuous CPR during patient transport
- Improves overall workflow in emergency scenarios

Q23. How does the device improve clinical outcomes?

By maintaining uninterrupted and high-quality compressions, the device supports:

- Improved blood circulation during cardiac arrest
- Reduced human error
- Better adherence to CPR protocols

7. Usability & Deployment

Q24. How user-friendly is the device?

The device is designed for rapid adoption with:

- One-button operation
- Automated calibration
- Minimal training requirements

Q25. How quickly can the device be deployed in an emergency?

The system supports rapid deployment, enabling immediate initiation of CPR within seconds.

. Portability & Durability

Q26. Is the device suitable for mobile and field use?

Yes. Its lightweight and compact construction make it ideal for:

- Ambulances
- Field emergencies
- Public access emergency systems

Q27. Is the device resistant to environmental exposure?

With an IPX3 rating, it is protected against light splashes, though it is not designed for heavy water exposure or submersion.

9. Manufacturer & Support

Q28. Who manufactures the device?

The device is developed and supplied by **Codex Healthcare**.

Q29. How can support or sales inquiries be made?

- Website: www.dexup.in

- Phone: +91 73853 04200
- Email: sales@dexup.in