

DC Charger

DC Charger for the °M Warmer System

USER MANUAL


ENGLISH

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1 INTRODUCTION

This manual provides the user with the information needed to successfully implement and operate the DC Charger for the °M Warmer System.

CAUTION: Federal law (USA) restricts this device to sale by or on the order of a physician.

 Before the DC Charger is used, the user manual for the °M Warmer System (supplied with each Power Pack*) and the DC Charger (this manual) should be thoroughly read.

Information regarding the DC Charger can be found in:

- The user manual for the DC Charger (this manual)
- The technical manual for the DC Charger (UK version) – other languages can be found online at www.mascot.no/downloads/user-manuals/

* In this manual, the term Power Pack is used to cover both the Power Pack and the Power Pack+

2 INDICATIONS FOR USE

The DC Charger is intended to be used for charging the Power Pack / Power Pack+ from a 10-30V DC outlet. The charging must take place outside the patient area, i.e. minimum distance from the patient of 1,5m.

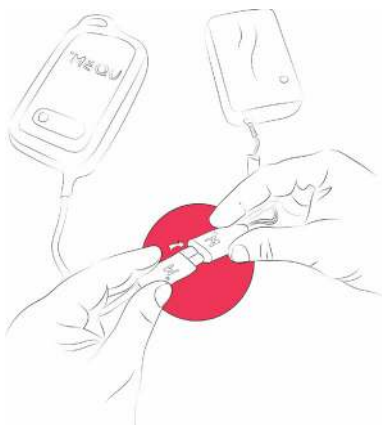
It is designed to be used by healthcare professionals in pre-hospital, hospital, clinical and other environment

3 UNPACKING OF THE DC CHARGER

After receiving the DC Charger you must inspect the shipping box and the content for damage that may have occurred during shipment. If any of the contents are visibly or mechanically damaged, or if the order is not complete, please contact your local supplier immediately.

You can order the latest edition of this manual by sending an e-mail to support@mequ.dk and write DC Charger User Manual in the subject line. Also, please specify which language you want the instructions in. You will then receive the instructions in a PDF version.

4 CHARGING OF THE POWER PACK



THE POWER PACK IS CHARGED AS FOLLOWS:

- Connect the DC Charger to the DC outlet using the plug on the DC Charger.
- Connect the Power Pack to the DC Charger

The Power Pack is fully charged and ready for use when all 4 LEDs are on and the green LED on the DC Charger lights up. The Power Pack can now be disconnected from the Charger. LED color behaviour on the DC Charger is described in the technical manual delivered with the DC Charger.

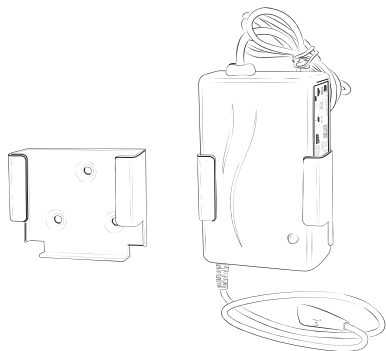
The charging must take place outside the patient area, i.e. minimum distance from the patient of 1,5m.

The DC Charger may be used for charging the Power Pack under stationary conditions as well as in moving vehicles. It is approved for use in airplanes and helicopters.

The DC Charger needs to be able to be unplugged if necessary. It therefore shall be easily accessible after installation and during use.

5 Mounting of the DC Charger

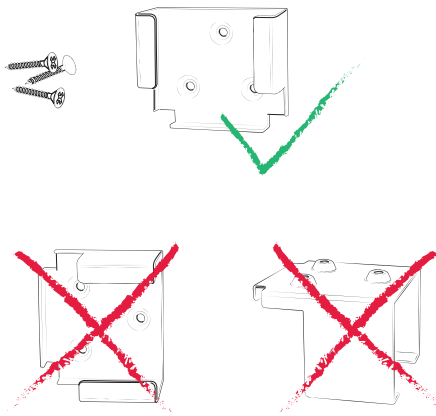
The DC Charger can be securely mounted in the vehicle using the bracket delivered with the DC Charger



The bracket is mounted using three screws appropriate for the type of material, the bracket is to be mounted on. The bracket is not designed for rail mounting.

The screws are not included with the bracket, and it is the users own responsibility to select appropriate screws and ensure, that the bracket is securely mounted.

The bracket must always be mounted vertically with the opening facing upwards in order to ensure, that the DC Charger does not fall out of the bracket.





6 DISPOSAL




The DC Charger is electrical and electronic equipment (as per EU directive 2012/19/EU on Waste Electrical and Electronic Equipment) and should therefore not be disposed with regular household waste.

Take the product to the nearest recycling collection facility.

7 SAFETY INFORMATION

For Cautions regarding the DC Charger – see the separate technical manual for the DC Charger.

-  Before the DC Charger is used, the user manuals for the °M Warmer System (supplied with the each Power Pack and the DC Charger should be thoroughly read.
-  Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they operating normally

-  Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation
-  Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30cm (12 inches) to any part of the ME equipment, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.
-  Connect only items that have been specified as part of ME SYSTEM or specified as being compatible with ME SYSTEM.

8 SYMBOLS

All information regarding symbols for the °M Warmer System, including the DC Charger, can be found in the °M Warmer System User Manual supplied with each Power Pack.

9 ELECTROMAGNETIC COMPATIBILITY

All information regarding Electromagnetic Compatibility for the °M Warmer System, including the DC Charger, can be found in the °M Warmer System User Manual supplied with each Power Pack.

10 TECHNICAL SPECIFICATIONS

DIMENSIONS	
Size	7.5cm (W); 11.7cm(L); 4.4cm (H); cable length (from DC Charger to plug for connecting to DC outlet) 138cm, cable length (from DC Charger to plug connecting to Power Pack) 53cm.
Weight	250g
POWER	
Standard DC Charger input voltage	10-30V DC
RECHARGE TIME	
Standard Recharge time	Power Pack: 2.5 hours Power Pack+: 3 hours
USE LIFE	
DC Charger use life	2 years
CLASSIFICATION	
Degree of protection against harmful ingress of subjects/water:	IP67: IP6x = Dust tight. IPx7: Protection against the effects of temporary immersion in water ingress of water in quantities causing harmful effects shall not be possible when the enclosure is temporarily immersed in water under standardized conditions of pressure and time)
CONNECTOR SPECIFIKATION	
MWS302	DC Charger with MIL STD D38999/26ZB98AN connector
MWS303	DC Charger with VG95234F-10SL-4PN connector
MWS304	DC Charger with VG95234G-10SL-3PN connector

The DC Charger is tested according to the following standards:

- EN 60601-1:2006 + AC 2013, CORR. 1 (2008) + CORR. 2 (2008) + AM1:2013 + AMD2:2021
- RTCA/DO-160G, Section 21
- EN 60601-1-2:2015 + A1:2021
- EN 60601-1-12:2015 + A1:2020
- ASTM F2172-02
- EN 13718-1:2014 + A1:2020
- EN 1789:2020 + A1:2023

11 ORDERING INFORMATION

Order number / Description

- *MWS302*
DC Charger with MIL STD D38999/26ZB98AN male connector
- *MWS303*
DC Charger with VG95234F-10SL-4PN male connector (2 pin bayonet connector, fits in female VG95234B1-10SL-4SN connector)
- *MWS304*
DC Charger with VG95234G-10SL-3PN male connector (3 pin connector)

Designed and developed in Denmark

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