

**Defibtech RBC-1000
Battery Pack Charging Station
for the Defibtech RMU-1000
Automated Chest Compression
System**



User Manual

***The Defibtech RMU-1000 ACC User Manual
is a supplement to this manual.***

**ELECTRONIC
DISTRIBUTION**

RAC-U1512EN-BF

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1 Introduction

This User Manual provides information to guide operators in the use and maintenance of the Defibtech RBC-1000 Battery Pack Charging Station.

1.1 Overview

The Defibtech RBC-1000 Battery Pack Charging Station is an optional accessory that charges the RBP-1000 lithium ion battery pack used to power the Defibtech RMU-1000 Automated Chest Compressor (ACC).*

It is a stand-alone item, intended for in-door use only and can charge up to two battery packs simultaneously and independently. The Battery Pack Charging Station consists of the charging stand, an AC adapter, and a power cord. The AC adapter provided and used with the Battery Pack Charging Station is the same AC adapter as that used to power the RMU-1000 ACC Compression Module. Refer to the RMU-1000 ACC User Manual for battery pack and AC power adapter specifications.

2 Safety Information

This chapter includes a list of warning and caution messages that relate to the Defibtech RBC-1000 Battery Pack Charging Station and its accessories. Many of these messages are repeated elsewhere in this User Manual and on the RMU-1000 ACC or accessories.

WARNING: Conditions, hazards, or unsafe practices that may result in serious personal injury or death.

CAUTION: Conditions, hazards, or unsafe practices that may result in minor personal injury, damage to the RBC-1000 Battery Pack Charging Station, or loss of data.

2.1 Warnings



All users must read these instructions for use before using the Battery Pack Charging Station.



Do not use in the presence of flammable gases or anesthetics. Use care when operating close to oxygen sources (such as bag-valve-mask devices or ventilator tubing). Turn off gas source or move away from patient, if necessary.



Do not use the Battery Pack Charging Station in a hyperbaric oxygen chamber. Failure to follow this warning may cause explosion or fire.

* Essential performance.

Warnings (continued)



WARNING

Use only the AC adapter and power cord supplied with the Battery Pack Charging Station. Using other AC adapters or power cords may cause unsafe conditions.



WARNING

To avoid the risk of electric shock, this equipment must only be connected to a supply mains with protective earth.



WARNING

Do not charge a battery pack which is damaged, discolored or has leakage. It may cause overheating, explosion or fire.



WARNING

Do not cover up the Battery Pack Charging Station when it is in use.



WARNING

If the battery pack, AC adapter, and/or stand becomes too hot to touch or otherwise appears faulty, immediately disconnect the power cord from the AC outlet, attach a "Do not use" or "To be repaired" label on the Battery Pack Charging Station and contact your local distributor or Defibtech representative.



WARNING

Care should be taken to maintain the condition of the power cord. Do not forcibly bend or place heavy objects on the power cord. If the power cord is damaged, do not use it.



WARNING

Do not sterilize the RBC-1000 Battery Pack Charging Station or its accessories.

2.2 Cautions



CAUTION

Only charge a Defibtech-specified rechargeable battery pack for use with the RMU-1000 ACC in the Battery Pack Charging Station. If an unspecified battery pack or a non-rechargeable battery is charged, it may cause overheating, explosion, fire or leakage.



CAUTION

Do not disassemble or modify the Battery Pack Charging Station. It may cause overheating, fire, electrical shock or injury.



CAUTION

For details on handling the battery pack and AC adapter, refer to the label and the RMU-1000 ACC User Manual.



CAUTION

The Battery Pack Charging Station stand is made for indoor use and is not water/dust proof or resistant. Do not place the charger stand in locations that are extremely hot or cold, dusty or dirty, very humid or vibrating. If the Battery Pack Charging Station stand is exposed to any of these conditions, it may cause fire or injury.



CAUTION

Do not allow metallic objects to contact the metal contacts of the Battery Pack Charging Station stand. Do not touch the Battery Pack Charging Station stand metal contacts when the power cord is plugged into AC power outlet.



CAUTION

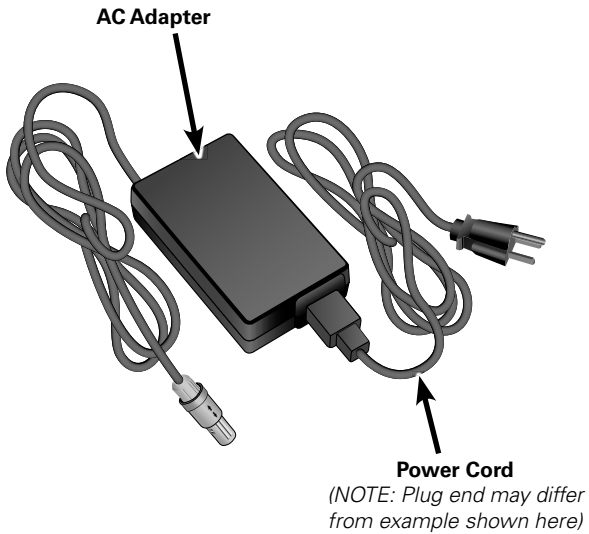
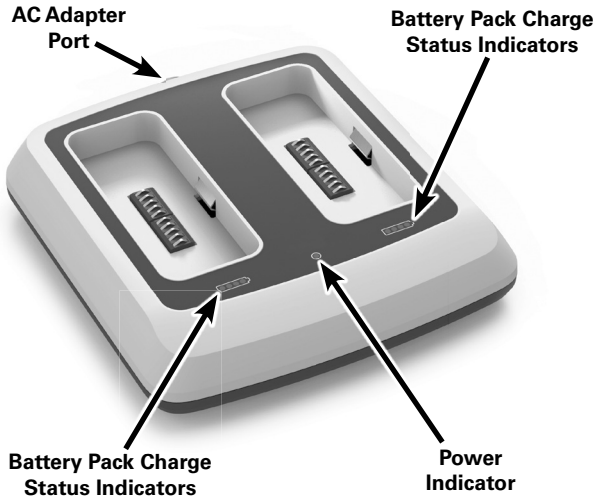
Do not drop the Battery Pack Charging Station stand or apply a mechanical shock to it.



CAUTION

Do not store or use the Battery Pack Charging Station stand outside of the specified conditions.

3 The RBC-1000 Battery Pack Charging Station



4 Setup Instructions

4.1 Connecting the Power Cord



WARNING

Use only the AC adapter and power cord supplied with the Battery Pack Charging Station. Using other AC adapters or power cords may cause unsafe conditions.



WARNING

To avoid the risk of electric shock, this equipment must only be connected to a supply mains with protective earth.

1. Place the charging stand near an accessible AC power outlet on a level surface.
2. Ensure that the power cord supplied is correct for your AC power outlet.
3. Connect the AC adapter cord to the battery charging stand then connect the power cord to the AC adapter and plug the power cord into an AC outlet on the wall.
4. When AC power is supplied to the Battery Pack Charging Station, the Power Indicator lights up green, indicating power is being supplied to the system.

4.2 Charging the Battery Pack

It takes about 2 hours to charge a new fully-depleted battery pack, 3 hours if charging two new fully-depleted battery packs. The charging time differs depending on operating environment.

1. Confirm that the Power Indicator is green. **Note:** If the Power Indicator is not green, check all cords and connections.
2. Before inserting any battery pack into the Battery Pack Charging Station, ensure that the date is within the battery pack's useful life specifications.
3. Insert the battery pack into the battery pack slot, pushing firmly until the battery clicks into place.
4. Upon initial battery pack insertion, the Battery Pack Charging Station displays the battery pack's current status for 3 seconds. If the battery has less than 20% charge remaining, the Battery Pack Charge Status Indicator will be red (either blinking slowly or solid).
5. The charging process begins immediately. Throughout the charging process additional Battery Pack Charge Status Indicators will become solid green. When charging is complete, all four Battery Pack Charge Status Indicators will be solid green.

Note: Refer to the Troubleshooting section of this document should other indicators be present.

Note: The battery packs charge independently, so it is possible to start charging another battery pack by repeating the above charging steps, as necessary.

4.3 Removing the Battery Pack After Charging

It is recommended that the battery pack should be fully charged before putting it back into use unless it is required for emergency use.

1. Pull the battery pack up from the Battery Pack Charging Station stand.
2. Confirm that the battery pack is sufficiently charged by pressing the “check” button on the bottom of the battery pack. See the RMU-1000 User Manual for additional details.
3. If the battery pack does not have sufficient capacity, ensure that an AC adapter is available for use with the RMU-1000 ACC.

Note: Leaving a battery pack in the Battery Pack Charging Station after it has reached a fully-charged state will not damage the battery pack or the Battery Pack Charging Station.

4.4 Post-Charging and Storage

When the battery pack is fully charged, all four Battery Pack Charge Status Indicators will be solid green.

1. To cut off the power to the Battery Pack Charging Station, disconnect the power cord from the wall AC outlet.
2. While not using the Battery Pack Charging Station stand, store it in a clean and dry environment.
3. When not using the AC adapter and power cord, refer to the RMU-1000 ACC User Manual for storage instructions and specifications.

Note: To extend the useful life of the Battery Pack Charging Station stand and AC adapter, it is recommended to remove the power cord from the AC wall outlet when the Battery Pack Charging Station is not in use.

5 Troubleshooting

Note: If the following actions do not solve the problem, attach a “Do not use” or “To be repaired” label or similar on the Battery Pack Charging Station and contact your local distributor or Defibtech representative.

<i>Symptom/Observation</i>	<i>Possible Cause/Criteria</i>	<i>Action</i>
The Power Indicator is not lit	No power or AC adapter and/or power cord malfunction	Confirm that power is being supplied to the Battery Pack Charging Station from the AC source. Check that the AC adapter and power cord are firmly connected.
	Charging stand malfunction	Contact your local distributor or Defibtech representative.
Any Battery Pack Charge Status Indicator is quickly blinking red	Battery pack and battery charger stand communication not established	Place battery pack in other slot to charge. Clean the battery contacts. Clean the Battery Pack Charging Station contacts. Replace the battery pack with a new one.
	The battery is too hot	Put the Battery Pack Charging Station and battery pack in a cool place. Charging automatically starts when the battery pack gets cool. Remove the source of overheating.
	There is a malfunction with the battery or charger	Contact your local distributor or Defibtech representative.
Any Battery Pack Charge Status Indicator is amber (yellow)	The battery has reached the end of its useful life.	Replace the battery pack with a new one.

6 Disposal



CAUTION

Dispose of the Battery Charging Station according to your local laws and your facility's guidelines for waste disposal. Otherwise, it may affect the environment.




CAUTION

If there is a possibility that the product may have been contaminated with infection, dispose of it as medical waste according to your local laws and your facility's guidelines for medical waste. Otherwise, it may cause infection.

Refer to the RMU-1000 ACC User Manual for disposal of other items.

6.1 Notice to European Union Customers



The crossed-out wheeled bin symbol  on this product indicates that this equipment has been put on the market after 13 August 2005, and is included in the scope of the directive 2002/96/EEC on Waste Electrical and Electronic Equipment (WEEE) and of the national decree(s) which transpose provisions of such directive.

At the end of its lifetime, this product can only be disposed of in compliance with the provisions of the above mentioned European directive (and as amended) as well as with the corresponding national regulations. Severe penalties are possible for unauthorized disposal.

Electrical and Electronic Equipment (EEE) may contain polluting components and hazardous substances the accumulation of which could pose serious risk for the environment and human health. It is for this reason that local Administrations provide regulations which encourage reuse and recycling, and prohibit the disposal of WEEE as unsorted municipal waste and require the collection of such WEEE separately (at specifically authorized treatment facilities). Manufacturers and authorized distributors are required to supply information about a safe treatment and disposition of the specific product.

You may also return this equipment to your distributor when purchasing a new one. As for reuse and recycling, notwithstanding the limits imposed by the nature and the use of this product, the manufacturer will do his best to develop recovery processes. Please contact the local distributor for information.

7 Cleaning and Disinfecting



CAUTION

Before cleaning or disinfecting the Battery Pack Charging Station stand, disconnect the AC adapter's power cord from the AC outlet. Failure to follow this instruction may result in electrical shock and Battery Pack Charging Station malfunction.

The following are important guidelines must be adhered to when cleaning the device:

To clean the Battery Pack Charging Station, use a soft cloth dampened with one of the following recommended cleaning agents:

- Soapy water
- Ammonia-based cleaners
- Hydrogen peroxide
- Isopropyl alcohol (70 percent solution)
- Chlorine bleach (30 ml/liter water)

Do not immerse the Battery Pack Charging Station in fluids or allow fluids to enter the unit.

Do not spray cleaning solutions directly on the unit or its connectors.

Please note that none of the items provided with the RBC-1000 Battery Pack Charging Station (including the Charging Station itself) are sterile or require sterilization.



WARNING

Do not sterilize the RBC-1000 Battery Pack Charging Station or its accessories.

8 Maintenance

The Battery Pack Charging Station stand is designed for minimal maintenance. Refer to the RMU-1000 ACC User Manual for maintenance of the AC adapter and power cord. When the charging station has not been used, has been dropped or otherwise as required by local protocol, it is recommended that periodically:

<i>Item</i>	<i>Verification</i>	<i>Action</i>
Battery Pack Charging Station	Visual inspection	<ul style="list-style-type: none">• Is clean and dry• No parts are damaged or rattling
Power Cord	Visual inspection	The cord jacket is not dirty, damaged, or torn
Power-on	Functional	Remove the battery pack from the battery pack slot, connect the power cord and check that the Power Indicator illuminates
Charging	Functional	When the battery pack is inserted in the battery pack slot, the Battery Pack Charge Status Indicators illuminate

8.1 Repair Parts Availability Policy

The Battery Pack Charging Station stand, AC adapter, and power cord contain no user serviceable parts.

9 Specifications

Power Requirements

Line voltage:	100 to 240 V
Line wattage:	100 W
Line frequency:	50/60 Hz
Power input:	50 VA or less

Charging Time*

Less than 2 hours if charging one Battery Pack
Less than 3 hours if charging two Battery Packs

Environment (Operating Conditions)

Temperature:	0 to 40°C (32 to 104°F)
Humidity:	30 to 90% (non-condensing)

Environment (Storage and Transport Conditions)

Temperature:	-20 to +70°C (-4 to +149°F)
Humidity:	10 to 90% (non-condensing)

Electromagnetic Compatibility

IEC 60601-1-2: 2014

Safety Standard

IEC 60601-1/A1:2012



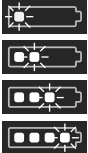








Type of protection against electrical shock: CLASS I EQUIPMENT
Degree of protection against harmful ingress of water: IPX0 (non-protected)








Physical

Dimensions:	6.7 x 7.0 x 1.5 inches (17 x 17.8 x 3.8 cm)
Weight (stand):	15 ounces (0.43 kg)

*typical, new battery, at 25°C

10 Glossary of Symbols

Symbol	Meaning
	Caution, consult accompanying documents.
	Alternating current.
	Battery charging.
	Battery charged (charging is complete; all LEDs are solid green).
	Consult operating instructions.
	This way up.
	Handle with care.
	Keep dry.
	Do not damage or crush.
	Do not expose to high heat or open flame. Do not incinerate.
	Stacking limit by number ("n" = number).

Symbol	Meaning
	Meets the requirements of the European Medical Device Directive.
	Conformity to product safety testing requirements.
	Follow proper disposal procedures.
	Manufacturer.
	Serial number.
	Catalogue number.
IPX0	No special protection. Refer to IEC 60529 for further information.
	Authorized European Representative: EMERGO EUROPE Prinsessegracht 20 2514 AP The Hague The Netherlands

11 Contacts



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(Sales)

(Medical Device Reporting)

(Service and Repair)



12 Warranty Information

ORIGINAL END USER'S LIMITED WARRANTY

COVERAGE

Defibtech, L.L.C. provides a LIMITED WARRANTY that the Automated Chest Compressor (ACC) (i.e., Backboard, Frame, and Compression Module) and its associated components (i.e., Battery Pack, AC Adapter, Stabilization Strap, Wrist Straps, and Patient Interface Pad (PIP)), and accessories (e.g., Carrying Case) (collectively referred to as "Products" and singularly as "Product") whether purchased concurrently or separately, shall be substantially free from defects in material and workmanship appearing under normal service and use. To qualify for WARRANTY SERVICE, the Product must have been continuously owned by the original purchaser and the original purchaser must have purchased the Product from Defibtech or an authorized Defibtech retailer. This LIMITED WARRANTY may not be assigned or transferred.

WARRANTY PERIOD

The Products shall have a WARRANTY PERIOD of one (1) year beginning on the date of delivery. The WARRANTY PERIOD for a single use Product (e.g., Patient Interface Pad) and Products having an expiration date shall end upon the earlier of use, expiration (if applicable), or end of the WARRANTY PERIOD. Any WARRANTY SERVICE, including but not limited to repair or replacement shall not extend a Product's WARRANTY PERIOD.

LIMITED WARRANTY SCOPE

This LIMITED WARRANTY does not cover damage of any sort resulting from, but not limited to, accidents, misuse, improper storage, improper operation, alterations, unauthorized service, tampering, abuse, neglect, fire, flood, war, or acts of God. Misuse shall include but not be limited to: use of the ACC with unapproved components; use of a Product with unapproved devices; or use of the Product in uncertified environments or settings. Defibtech does not warranty error-free or interruption-free performance of any Product.

LIMITED WARRANTY VOIDED

The LIMITED WARRANTY is immediately voided if: the Product is serviced or repaired by any entity, including persons, not authorized by Defibtech; specified Product maintenance is not performed; the Product is used with one, or more, unauthorized components or devices; or the Product is not used in accordance with Defibtech approved instructions.

WARRANTY SERVICE

At Defibtech's sole discretion, Defibtech shall have the option to repair, replace, or provide a credit. In the event of repair or replacement, Defibtech shall have the right at its sole discretion to replace the Product with a new, or refurbished, same or similar Product, and all Products or parts replaced shall become the property of Defibtech. Determination of a similar Product shall be at the sole discretion of Defibtech. In the case of replacement, the replacement at a minimum shall reflect the prorated time remaining for the Product based on the remaining WARRANTY PERIOD. In the case of a credit, the credit shall be the prorated value of the Product based on the lower of the original Product cost of the same or similar Product and the remaining WARRANTY PERIOD. Repair or replacement of a Product under this LIMITED WARRANTY does not extend the Product's WARRANTY PERIOD.

WARRANTY SERVICE (CONTINUED)

In order to obtain WARRANTY SERVICE, the original owner must contact the Defibtech authorized retailer from whom the Product was purchased, or Defibtech customer service. In the event a Product must be returned, a Defibtech issued Return Material Authorization (RMA) number is required. Products returned without a Defibtech authorized RMA number will not be accepted. The Product shall be shipped at the original end user's expense to a destination specified by the retailer or Defibtech.

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