

■ User Manual  
PowerCharger



for

ZOLL Lead Acid batteries  
ZOLL SurePower® batteries  
ZOLL Propaq MD® batteries  
and PowerDrive batteries



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**Welcome,**

Thank you for choosing PowerCharger.

To ensure safe operation we advise you to familiarize yourself with this user manual, please read this manual carefully before use.

The manufacturer does not assume liability for damage and/or failure due to incorrect use or installation.

Keep this manual in a safe place for future reference. We advise you to pay particular attention to the safety instructions.

## ■ SAFETY INSTRUCTIONS

- Please also reference the user manual of your battery.
- Always check that the battery is securely inserted and it is properly connected to the PowerCharger. Take note of what the LEDs on the top side of the PowerCharger indicate.
- Should the PowerCharger have been damaged through a blow or fall, or should liquids have entered the case, it should not be used again until all functions have been properly checked.
- The PowerCharger cannot be used with an autoclave. Do not allow liquids to enter the PowerCharger.
- Do not insert any objects into the PowerCharger case.
- Please only use the recommended accessories.

## ■ APPLICATION

The PowerCharger is exclusively for use with the following rechargeable batteries:

ZOLL lead acid batteries

ZOLL SurePower® Lilon batteries

ZOLL Propaq MD® batteries

PowerDrive Lilon batteries

The PowerCharger can be used with a DC power supply from 11 to 30 VDC. An alternating current power supply from 100 to 230 VAC (50-60Hz) can also be used, however, only with the original power adapter (P/N 6309933029).

## ■ SCOPE OF DELIVERY

- 1 PowerCharger P/N 2103733002
- 1 AC/DC power adapter  
for PowerCharger P/N 6309933029  
with different plug adapters  
for AC/DC power supply
- 1 User's manual

**■ TECHNICAL DATA**

Dimensions	L 22.5 cm x H 9.0 cm x B 10.0 cm
Weight	765 g (27 oz.)
Input Voltage	11 – 30 VDC
Power consumption	15 W
Charging current	1.0 A(max)
Operating Temp.	0°C to +50°C (32°F to 120 °F)
Optimal Charging Temp.	+15°C to +35°C (60°F to 95°F)
Storage Temp.	-40°C to +70°C (-40°F to 160°F)

## Table of charging times

Battery	P/N	Designation	Charging Time*
PowerDrive	2103733001	M   M Series CCT	ca. 4.5h
ZOLL SurePower® **	8019-0535-01	E   R Series   AED Pro	ca. 6.0h
ZOLL Lead Acid	8000-0299-08	E   M   M Series CCT   AED Pro	ca. 3.0h
ZOLL Smart ** ZOLL Smart Ready	8004-0103-08 8004-0104-08	E   M   M Series CCT	ca. 3.0h
ZOLL Smart XL ** ZOLL Smart Ready XL	8000-0687-08 8000-0500	E   M   M Series CCT	ca. 4.5h
ZOLL Propaq MD® **	8000-0580-01	Propaq MD	ca. 7.5h

\* the times listed are valid for new batteries, discharged in a ZOLL defibrillator

\*\* After a full charging cycle not all five LEDs of the battery level indicator may light up when pressing the battery capacity test button. A possible reason is that the PowerCharger performs no recalibration/ restoring battery level indicator accuracy and uses a charging technology that extends the lifetime of the battery. This charging algorithm also uses a charging voltage lower than the highest possible voltage of the battery.

Specifications subject to change without notice.

## ACCESSORIES

Currently not available.

## ■ OPERATION

### Connecting PowerCharger

Connect the round plug on the AC/DC power adapter with the round socket on the rear of the PowerCharger and the main plug into an AC socket (e.g. with 120 VAC).

### Automatic Self-Diagnostic

Once the PowerCharger has been connected to a power supply it will automatically conduct a self diagnostic. This should take approximately three seconds, in which time all 4 LEDs should light up. Should one of the LEDs not light up, this indicates that the PowerCharger is faulty and must be sent in for repair. If the self diagnostic is successfully concluded the green "ON" LED will remain lit.

### Inserting the battery into the PowerCharger

Place the battery into the PowerCharger so that after insertion an audible click is heard and the battery is secured in the docking station. The battery has been made to fit the docking station in a predefined way to ensure that the charging pins always connect.

Never force the battery into place.



With every insertion make sure the battery is secured and properly connected to the PowerCharger. If correctly inserted the orange LED "CRG" (Charge) will be lit.



## Removal of the battery from the PowerCharger

Push the release tab towards the battery and pull the battery out of the PowerCharger.



The casing of the PowerCharger as well as the battery may feel warm after unusually long charging times.

## Charging and Discharging

Charging begins as soon as the battery is connected to the PowerCharger and is indicated by the orange “CRG” (Charge) LED flashing. When the charging cycle is completed the orange “CRG” LED will remain lit.

Pressing the DISCRG (discharge) button will start the discharging cycle, during this sequence the battery will initially be fully recharged, then completely discharged. This cycle will be indicated by the orange LED “DISCRG” flashing. After successfully completing this cycle, the battery will automatically fully recharged, indicated by the orange LED “CRG” (charge) being lit.

As a result of these three steps it may take up to 24 hrs for a complete cycle to finish.

Switching from the discharging to charging function is possible by removing and reinserting the battery.

**■ LED LIGHTS**

ON	green	PowerCharger connected to power
CRG	orange	PowerCharger is charging battery, LED flashing indicates if battery is empty or charging; LED is lit when battery fully charged
ERR	red	error (see below)
DISCRG	orange	discharging of battery; LED flashing

## ■ TROUBLESHOOTING

Error Indication	Error Type	Possible Solution
LED "ON" does not light	No power supply	<p>Check the power supply connection</p> <p>Check if the green LED on the power adapter is lit</p> <p>If yes: PowerCharger is defective</p> <p>If no: Power adapter is defective</p>
LED "ERR" is flashing	Device failure (e.g. overheating)	<p>Remove power supply and let device cool.</p> <p>LED still flashing, battery voltage is too high. Discharge the battery by using a ZOLL Defibrillator / Monitor.</p> <p>If device is plugged in again and LED is still flashing PowerCharger is defective</p>
LED "ERR" is on	Charging error	Remove and re-insert battery

Error Indication	Error Type	Possible Solution
LED "CRG" is not on with battery inserted	Battery error	Remove and re-insert battery  If LED still does not light, battery is defective
LED "DISCRG" does not light with battery is inserted and "DISCRG" button has been pressed	Battery error	Remove and re-insert battery  If LED still does not light, battery is defective



For further information please contact the manufacturer.

## ■ CLEANING and DISINFECTION

For cleaning or disinfection, please remove the battery from the PowerCharger and disconnect the power supply.

The surface of the PowerCharger can be cleaned with a mild surface cleaner and a moistened cloth. For disinfection, please use standard disinfectants and make sure they do not damage plastic surfaces.



The PowerCharger is not for use with an autoclave. Do not allow liquids to enter the device.

## ■ SYMBOLS



See accompanying documents/ user manual



CE-Declaration of conformity according to EU-directive 2004/108/EG



Operating Temperature -5°C to +55°C

Optimal Charging +15°C to +35°C

Storage Temperature Humidity -30°C to +60°C

Humidity 5% to 95% (relative – non-condensing)

**P/N**

Part Number

**S/N**

Serial Number



Keep Dry



Top



Recyclable



Fragile goods



Manufacturer



e1-Declaration of conformity according to EU-directive 72/245/EWG / EEC as last amended by 2009/19/EG

**DISPOSAL**

Before disposing of the PowerCharger, please clean and disinfect the device. Please dispose of following local laws and regulations for recycling.



Packing is raw material and therefore recyclable. On behalf environmental protection please sort the packaging before disposing. Dispose and recycle all packaging according to your local laws and regulations.

For more detailed information on proper disposal please contact manufacturer.

■ SERVICE / MANUFACTURER



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