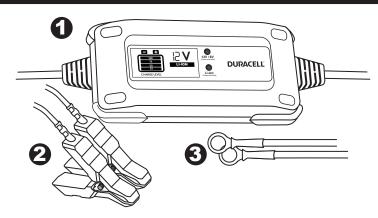
# **DURACELL**®

## 4 Amp Battery Charger / Maintainer (Model DRMC4A)

## 1. What's Included



- 1. Charger/Maintainer with LCD display
- 2. Quick-connect battery clamps
- Quick-connect ring terminal cable with replaceable fuse

# ⚠ WARNING: EXPLOSION HAZARD

A spark near the battery may cause an explosion. Follow instructions carefully to reduce the risk of spark near the battery. Do not face the battery when making the final connection.

## ⚠ WARNING: BATTERY DAMAGE

Do not use Li-Ion charging mode if you are connecting an SLA/AGM battery. Additionally, if you are connecting a Li-ion battery, please ensure that Li-Ion mode is selected. Using the wrong charge mode may damage your battery.

## CAUTION: EQUIPMENT DAMAGE

To avoid damaging your charging and battery charger cables, grasp each quick-connect terminal directly. Do not pull directly on either cord. Do not start the vehicle's engine while the charger is still connected to the battery. This will damage the charger and void the warranty.

## 2. Important Safety Information

- Warnings identify conditions that may result in personal injury or loss of life.
- Cautions identify conditions or practices that may damage the unit or other equipment.

# **MIMPORTANT**

This guide contains important safety and operating instructions in how to use the battery charger to recharge 6V and 12V vehicle batteries.

- 1. Do not expose the battery charger to moisture, rain, or snow.
- 2. Use of an adapter not recommended due to potential risk of fire, electric shock, and/or injury.
- 3. To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting the battery charger.
- 4. Do not operate the battery charger with damaged cord or plug have the cord or plug replaced.
- 5. Do not operate the battery charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; contact the manufacturer for repair or replacement.
- 6. Do not disassemble the battery charger. Incorrect reassembly may result in shock or fire hazard.
- 7. To reduce risk of electric shock, unplug the battery charger from the electric outlet before attempting any maintenance or cleaning.

# WARNING: RISK OF EXPLOSIVE GASES

Working in the vicinity of a lead-acid battery is dangerous. Batteries generate explosive gases during normal battery operation. For this reason, it is of utmost importance that each time before using a battery charger, you read this guide and follow the instructions exactly. To reduce risk of battery explosion, follow these instructions and those published by battery manufacturer and manufacturer of any equipment you intend to use in the vicinity of the battery. Review cautionary marking on these products and on any engine.

## **Personal Precautions**

- 1. Someone should be within range of your voice or close enough to come to your aid when you work near a lead-acid battery.
- 2. Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing, or eyes.
- 3. Wear complete eye protection and clothing protection. Avoid touching eyes while working near battery.
- I. If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters eye, immediately flood eye with running cold water for at least 10 minutes and get medical attention immediately.

- 5. NEVER smoke or allow a spark or flame in the vicinity of battery or engine.
- 6. Be extra cautious to reduce risk of dropping a metal tool onto a battery. It might spark or short-circuit the battery or other electrical part that may cause an explosion.
- 7. Remove personal metal items such as rings, bracelets, necklaces, and watches when working with a lead-acid battery. A lead-acid battery can produce a short-circuit current high enough to weld a ring or the like to metal, causing a severe burn.
- 8. Use the battery charger for charging a 6V or 12V LEAD-ACID or LITHIUM-ION battery only. It is not intended to supply power to a low voltage electrical system. Do not use the battery charger for charging dry-cell batteries that are commonly used with home appliances. These batteries may burst and cause injury to persons and damage to property.
- 9. NEVER charge a frozen battery.

## **Charger Location**

- 1. Place the battery charger as far away from the battery as the output DC cable permits.
- 2. Never place the battery charger directly above a battery being charged; gases from battery will corrode and damage the charger.
- 3. Never allow battery acid to drip on the charger when reading specific gravity or filling battery.
- 4. Do not operate the charger in an enclosed area. Do not restrict ventilation in any way.
- 5. Do not set a battery on top of the charger.

Failure to follow these safety guidelines may cause personal injury and/or damage to the battery charger. It may also void your product warranty

## 3. FCC Statement

This device complies with Part 15 of the FCC Rules. Operation of this product is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply within the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced technician for help.

Changes or modifications not expressly approved by the party responsible for compliance with the FCC Rules could void the user's authority to operate this equipment.

## 4. Canada ICES-003 Statement

This Class B digital apparatus complies with Canadian ICES-003.

- 1. Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropic ally radiated power (e.i.r.p.) is not more than that necessary for successful communication.
- 2. This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.
- 3. "This device complies with Industry license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device."

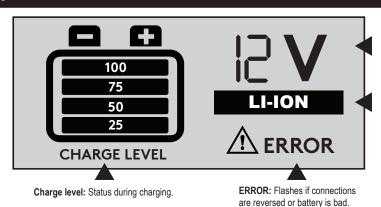
#### Recommended minimum AWG size for extension cords for battery chargers

AC Input rating, amperes		AWG size of cord  Length of cord, feet (m)			
		(7.6)	(15.2)	(30.5)	(45.6)
0	2	18	18	18	16
2	3	18	18	16	14
3	4	18	18	16	14
4	5	18	18	14	12
5	6	18	16	14	12
6	8	18	16	12	10
8	10	18	14	12	10
10	12	16	14	10	8
12	14	16	12	10	8
14	16	16	12	10	8
16	18	14	12	8	8
18	20	14	12	8	6

<sup>\*</sup> If the input rating of a charger is given in watts rather than in amperes, the corresponding ampere rating is to be determined by dividing the wattage rating by the voltage rating — for example:

1250 watts/125 volts = 10 amperes

## 5. LCD Screen

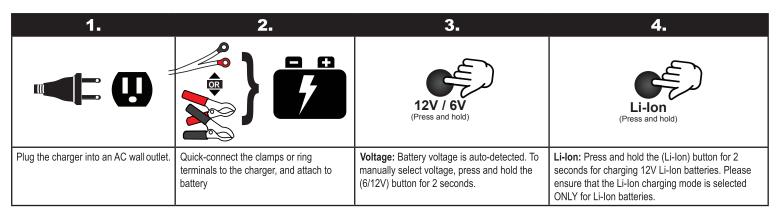


Selected battery voltage (either 12V or 6V).

Battery Type Selected: "LI-ION" displayed if Lithium (LiFePO4) selected. This area is blank if "standard" Lead Acid/SLA/AGM selected.

## 6. Using Your Charger

- 1. Be sure the area around the battery is well-ventilated while the battery is being charged.
- Clean battery terminals before connecting.
- 3. Follow all battery manufacturer's recommendations.



## 7. Troubleshooting

1.	Charger does not automatically begin to charge my battery once connected.	(A) If your 12V battery is too discharged the charger may go to 6V mode. You will need to press and hold the 12V/6V button to manually select 12V mode.  (B) If the battery is completely discharged, or is damaged, the charger may not be able to recharge it. See "Error" section of LCD Screen for details  (C) Poor connection; clean terminals and ensure secure connection.
2.	Charger screen "ERROR" message is flashing	Indicates two possible problems:  (A) Reverse polarity: Check your connection and switch if needed.  If error message is still flashing,  (B) Defective battery: The battery is damaged and cannot be recharged. Replace the battery.

## 8. Specifications

## **AC Input Specifications**

Input	100~240Vac, 50~60Hz, 70W	
DC Output Specifications		
Output charging current	12VDC at 4A, 6VDC at 1A	
Charging type	Mutli-stage charging	

Bad battery

**Protection Features** 

Battery reverse polarity

Additional protections

Approvals			
	UL1236 & UL1310, CSA 22.2 No.107.2 FCC Part 15 Class B SDOC, ICES-003 CEC-BC, DOE, Nrcan		
	IP65 Rated		
	RoHS		

Error indication

Error indication

Output short protection; over-temperature

protection; over-charge protection

## 9. Recycling Information

Battery-Biz is committed to environmental responsibility and recommends that electronic devices be disposed of properly. Please contact your local city offices for information on recycling and disposal programs for e-waste.

For instructions on how to recycle this product visit http://www.call2recycle.org.

## 10. Contacting Customer Support

If you experience any problems or have any questions regarding this product, free technical support is available. Prior to calling, please review the technical support tips below. Call from a phone where you have access to your mobile device.

Be prepared to provide the following information:

- Name, address and telephone number
- Name of the DURACELL® product
- Make and model of your device
- Symptoms of the problem(s ) and what led to them

Technical Support is available by telephone: U.S. and Canada 1-800-300-1857 Outside of the US/Canada: 805-437-7765

Written inquires should be directed to: Battery-Biz Inc.; DURACELL® Product Inquiry 1380 Flynn Road, Camarillo, CA 93012, USA

## 11. Warranty and Return Information

#### **Three Year Limited Warranty**

This DURACELL® product carries a limited warranty against defects in material and workmanship under normal use and service for three years from the original date of purchase. The manufacturer or distributor, at its option, shall repair or replace the defective unit covered by this warranty. Please retain the dated sales receipt as evidence of the date of purchase as it will be required for any warranty service. In order to keep the warranty in effect, the product must have been handled and used as described in the instructions accompanying this warranty. This warranty does not cover any damage due to accident, misuse, abuse or negligence.

#### **Disclaimer Of Warranty**

The limited warranty described herein is your sole remedy. To the extent permitted by law, the manufacturer and distributor disclaim all other implied or express warranties including all warranties of merchantability and/or fitness for any particular purpose.

### **Limitation Of Liability**

Except to the extent of repairing or replacing this product as expressly stated in the limited warranty described herein, the manufacturer and distributor shall not be liable for any damages, whether direct, indirect, incidental, special,consequential, exemplary, or otherwise, including lost revenues, lost profits, loss of use of software, loss or recovery of data, rental of replacement equipment, downtime, damage to property, and third-party claims, arising out of any theory of recovery, including statutory, contract or tort. Not withstanding the term of any limited or implied warranty, or in the event that any limited warranty fails of its essential purpose, in no event will the manufacturer's and distributors entire liability exceed the purchase price of this product. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages so the above limitations or exclusions may not apply to you. This limited warranty gives you specific legal rights. You may have other rights which vary from state to state and province to province.

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