

oricom®

BC210

12V/24V Battery Charger and Maintainer



USER MANUAL



Keep this user guide for future reference.
Always retain your proof of purchase in case of Warranty service.
www.oricom.com.au

Warnings and Safety Precautions

1. Do not charge a lithium battery without a battery management system (BMS) protection board incorporated in the lithium battery. Before using the BC210 to charge a lithium battery confirm a BMS is fitted to your battery or a hazard may occur.
2. Batteries below 20AH should be charged with the minimum current setting.
3. The charger is designed for individual 12V and 24V Lithium, Lead-acid and LiFePO4 batteries up to 200AH.
4. Check battery specifications before use.
5. Only use in well ventilated conditions to prevent flames and sparks.
6. Do not expose charger to the sun or in high temperature environment.
7. Battery acid is corrosive. Rinse immediately with water if acid comes into contact with skin or eyes.
8. Do not charge a frozen or damaged battery.
9. Do not charge non-rechargeable batteries.
10. Do not place the charger on the battery while charging.
11. Be extra cautious to reduce risk of dropping a metal tool on the battery. It might spark or short-circuit the battery that may cause explosion.
12. When working with a lead-acid battery, remove personal metal items.
13. In order to reduce risk of electric shock, unplug charger from AC outlet before doing any maintenance or cleaning.
14. **Keep away from children, this is not a toy.**

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Function Introduction

The Oricom BC210 intelligent charger is an efficient charging device, suitable for various 12/24V batteries, including; Lead-acid, lithium and lithium iron phosphate batteries. The charger uses advanced smart charging technology to quickly charge whilst protecting the battery and extending battery life.

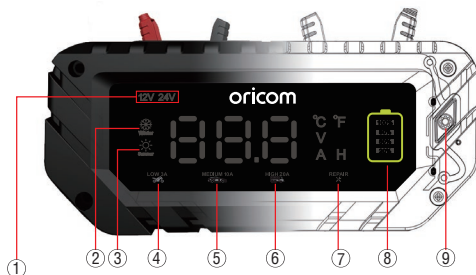
Product Description

- 1. Efficient charging:** The smart charger uses high-frequency charging technology, which can greatly shorten the charging time, improve charging efficiency and effectively avoid the problems of battery damage and shortened life caused by overcharging and long charging time with high currents.
- 2. Intelligent control:** The charger has an intelligent control function, which can automatically identify the type and status of the battery, charge according to the battery condition, avoid overcharge and undercharge, protect the battery and extend the battery life.
- 3. Multiple protection:** The smart pulse charger has multiple protection functions, including overcharge protection, over current protection, short circuit protection, reverse connection protection, to ensure the safety of the charging process.

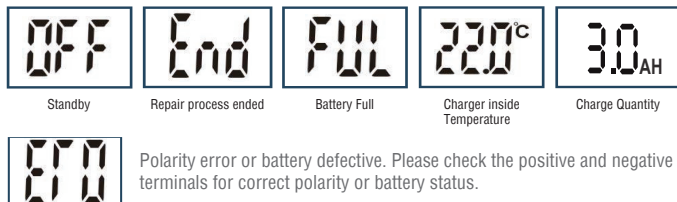
Charger Setup

1. Connect RED (+positive) connection to the battery first.
2. Connected BLACK (-negative) connection to vehicle chassis or battery negative.
3. Connect charger to mains power.
4. Select charging mode, Low, Medium, High or Repair mode. During the charging process, the charger will automatically identify the battery type and status for intelligent control charging.
5. After charging is complete, the charger will automatically go to trickle charge mode.
6. Switch off from mains power and disconnect charger from the mains, then remove the chassis or battery (-negative) connection and then battery (+positive) connection.

AC Input Voltage	100-240V~50/60Hz
Input Power with Load	Max 280W
Output Voltage	12V mode lead acid 14.7V. AGM summer 14.7V, winter 14.4V. LiFePO4 14.6V 24V mode lead acid 29.4V. AGM summer 29.4V, winter 28.8V. LiFePO4 29.2V
Output Current	12V Max 20A/24V Max 10A
Trickle charge current	12V 5A, 24V 3A mode = 0.5A 12V 10A, 24V 5A mode = 0.6A 12V 20A, 24V 10A mode = 0.8A
Battery Type	Lithium, LiFePO4, Lead-acid[AGM, GEL, SLA, Flooded, WET, EFB]
Dimension	230*185*110mm
Net weight	1200g



- 1: Battery voltage indicator during charging
- 2: Winter mode indicator
(illuminates when the ambient temperature is below 10 degrees Celsius)
- 3: Summer mode indicator
(illuminates when the ambient temperature is higher than 28 degrees Celsius)
- 4: Low current charging mode (12V 5A, 24V 3A)
- 5: Medium current charging mode (12V 10A, 24V 5A)
- 6: High current charging mode (12V 20A, 24V 10A)
- 7: Repair mode
- 8: Charging saturation state
- 9: Mode selection button



Polarity error or battery defective. Please check the positive and negative terminals for correct polarity or battery status.

Questions & Answers

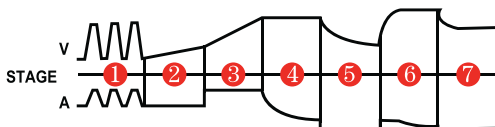
1. Why does the charger not work properly?

A: Please check whether the charger is plugged into the power socket, whether it is properly connected to the battery, and whether there is a short circuit.

2. Why does the charger heat up when charging?

A: The charger will generate a certain amount of heat during the charging process, which is normal, but if the charger overheats, please stop using it and contact Oricom Support.

7-stage Charging Process Optimizing Battery Power Precisely and Gently



- 1: Battery desulfation
- 2: Soft start charging
- 3: Bulk charging
- 4: Absorption charging
- 5: Battery test
- 6: Recondition charging
- 7: Float & maintenance charging (trickle charge)

Warning

1. Unplug charger from mains power when not in use to extend life of charger.
2. Do not expose the charger to high temperature, humidity, inflammable, explosive and other environments to avoid potential hazards.
3. Do not connect the charger clamps to the battery in the opposite polarity to avoid damage to the charger and battery.
4. Do not connect the charger with non-specified batteries to avoid potential hazards.
5. Do not disconnect the charger from the battery while in use to avoid interrupting the charging process or other potential spark hazard.

Note

1. Do not store the charger in high temperature, humid, flammable, explosive and other environments.
2. Do not disassemble or repair the charger, this will void warranty and may affect the performance and safety of the charger.
3. Do not expose the charger to water or any other liquids.
4. If the AC supply cord is damaged, it must be replaced by Oricom, an Oricom authorised service agent or similarly qualified persons to avoid a hazard.

Express Warranty (Australia)

This Express Warranty is provided by Oricom International Pty Ltd ABN 46 086 116 369, Unit 1, 4 Sovereign Place, South Windsor NSW 2756, herein after referred to as "Oricom".

Oricom warrants that the product is free from defects in materials or workmanship during the Express Warranty Period. This Express Warranty does not extend to any product from which the serial number has been removed or was purchased outside of Australia.

The benefits of this Express Warranty are in addition to other rights and remedies you may have under the Australian Consumer Law. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. In the event of a minor failure, Oricom reserves the right to choose to repair or replace the product.

The Express Warranty Period will be a period of 3 Years beginning on the date of purchase of the product evidenced by your dated sales receipt. You are required to provide proof of purchase as a condition of receiving Express Warranty services.

You are entitled to a replacement product or repair of the product at our discretion according to the terms and conditions of this document if your product is found to be faulty within the Express Warranty Period. This Express Warranty extends to the original purchaser only and is not transferable.

Products distributed by Oricom are manufactured using new materials or new and used materials equivalent to new in performance and reliability. Spare parts may be new or equivalent to new. Spare parts are warranted to be free from defects in material or workmanship for thirty (30) days or for the remainder of the Express Warranty Period of the Oricom branded product in which they are installed, whichever is longer. During the Express Warranty Period, Oricom will where possible repair and if not replace the faulty product or part thereof. All component parts removed under this Express Warranty become the property of Oricom. In the unlikely event that your Oricom product has a recurring failure, Oricom may always, subject to the Competition and Consumer Act 2010, at its discretion, elect to provide you with a replacement product of its choosing that is at least equivalent to your product in performance.

No change to the conditions of this Express Warranty is valid unless it is made in writing and signed by an authorised representative of Oricom.

Oricom will not be liable under this Express Warranty, and to the extent permitted by law will not be liable for any defect, loss, damage or injury arising out of or in connection with a:

1. Failure by you to adhere to the warnings and follow the instructions set out in this user guide for the proper installation and use of the product;
2. Wilful misconduct or deliberate misuse by you of the product;
3. Any external cause beyond our control, including but not limited to power failure, lightning or over voltage; or
4. Modification to the product or services carried out on the product by anyone other than Oricom or Oricom's authorised service provider.

How to make a claim under your Express Warranty in Australia

Oricom has a simple warranty process for you to follow:

- Please call or email our Customer Support Team, (02) 4574 8888 or support@oricom.com.au.
- A Customer Support Team member will verify after troubleshooting with you if your product qualifies under warranty. If so, they will give you a Product Return Authorisation number.
- We will then email or fax a Return Authorisation form and a Repair Notice (if necessary), together with instructions on how to return the goods for warranty service.

Please note that if a Customer Support Team member advises that your product does not qualify for return, this warranty does not apply to your product. Products that are authorised to be returned to Oricom in Australia must include all of the following:

- A completed Return Authorisation form
- A copy of your Proof of Purchase (please keep your original copy)
- The faulty product, including all accessories.

Send the approved returns to:

Oricom International Pty Ltd
Locked Bag 658
South Windsor NSW 2756 Australia

Please note that this Express Warranty excludes expenses incurred by you in returning any faulty product to us. You must arrange and pay any expenses incurred (including postage, delivery, freight, transportation or insurance of the product) to return the faulty product to us, however, we will arrange delivery of the repaired or replaced faulty product to you.

Important Information

Repair Notice

Please be aware that the repair of your goods may result in the loss of any user generated data (such as stored telephone numbers, text messages and contact information). Please ensure that you have made a copy of any data saved on your goods before sending for repair. Please also be aware that goods presented for repair may be replaced by refurbished goods or parts of the same type rather than being repaired.

ORICOM CUSTOMER SUPPORT

Oricom have a trained and dedicated team of Customer Support Representatives, each with the knowledge and resources to assist in answering your questions quickly and efficiently.

Oricom Support - Australia

For all product enquiries, troubleshooting or to discuss the range of Oricom products, feel free to contact Oricom or visit our website for answers to frequently asked questions.

(02) 4574 8888

Monday - Friday 8am - 6pm AEST

Email: support@oricom.com.au

www.oricom.com.au

Oricom Support - New Zealand

0800 674 266

Monday - Friday 11am - 7pm NZST

Email: support@oricom.co.nz