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Original Instructions
Version 1
January 2026

6V/12V SMART

BATTERY CHARGER

32295



1.1 Product Reference

User Manual for: 6V/12V Smart Battery Charger

Stock No: 32295

Part No: BCM1

1.2 Revisions

Version 1: January 2026

First release

As our manuals are continually updated, always ensure that the latest version is used.

Please visit drapertools.com/manuals for the latest version of this manual and the associated parts list, if applicable.

1.3 Understanding the Safety Content of This Manual

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WARNING! – Situations or actions that may result in personal injury or death.
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CAUTION! – Situations or actions that may result in damage to the product or surroundings.

Important: – Information or instructions of particular importance.

1.4 Copyright © Notice

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3. Product Introduction

3.1 Intended Use

This product is a microprocessor controlled automatic charger designed to charge both 6volt and 12volt maintenance and non-maintenance free vehicle batteries.

Any other application beyond the conditions established for use will be considered misuse. Draper Tools accepts no responsibility for improper use of this product.

This product is intended for domestic use only.

3.2 Specification

Stock No.	32295
Part No.	BCM1
Rated Voltage	220 - 240V/50Hz
Battery Voltage	6V/12V
Rated Output Current	1A @ 12V
Charging Starting Voltage	5V
Rated Battery Charging	
Charging	4 - 30Ah
Maintenance	4 - 120Ah
Protection Class	II
Protection Type	IP54
Operating Temperature	-20 to 40°C
Suitable Battery Types	Lead Acid WET, MF (maintenance free), AGM & GEL
Input Cable Length (approx)	1.5M
Output Cable Length (approx)	1.5M
Net Weight	290g

4. Health and Safety Information

Important: Read all the Health and Safety instructions before attempting to operate, maintain or repair this product. Failure to follow these instructions may result in injury or damage to the user, the product or the battery.

4.1 Vehicle Battery Health and Safety Precautions



WARNING!
Risk of explosive gases

- Working in the vicinity of lead-acid batteries is dangerous as they generate explosive gases during normal operation. Follow these instructions and those published by the battery manufacturer and the manufacturer of any other equipment to be used in the vicinity of the battery.
- Review warning markings on all these products and on the engine.
- When working near a lead-acid battery, ensure someone is within range of your voice or close enough to come to your aid.
- NEVER** smoke or allow a spark or flame near the battery or engine.
- Take extra care not to drop a metal tool onto the battery. It could spark or short circuit the battery.



WARNING!
NEVER charge frozen batteries.

- Wear suitable eye and face protection.
- Have plenty of fresh water and soap nearby in case battery acid contacts eyes, skin or clothing. If acid enter eyes, wash eye under cold clean running water for at least 15 minutes and get medical attention immediately.
- Remove any metallic items such as rings, bracelets, necklaces and watches. A lead-acid battery can produce a short circuit current high enough to weld a metallic item, which may cause a severe burn.

4.2 Charger Specific Health and Safety Precautions

- The battery charger is for indoor use **ONLY**. **DO NOT** expose to rain or wet conditions.



CAUTION! To reduce the risk of injury, only use the charger for charging Lead Acid, GEL, Calcium, AGM and automotive type rechargeable batteries.

- **DO NOT** charge lithium batteries.
- It is not intended to supply power to a low voltage electrical system other than in a starter motor application.
- **DO NOT** use for charging dry-cell batteries, these batteries may burst and cause injury to persons or damage to property.
- **DO NOT** touch the battery charging clamps together when the charger is on.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- Before plugging the charger into the power supply, check that the plug, cord and casing are in good condition. If they are damaged or any defective part/s evident, get them replaced immediately by a suitably qualified person.
- **ONLY** use the clamps and accessories recommended and supplied by Draper Tools.
- **DO NOT** use this unit if the clamp leads are damaged or worn.



WARNING! Explosive gases, Prevent flames and sparks. During charging provide adequate ventilation. The battery must be placed in a well-ventilated area (for chargers for lead-acid batteries).

- Set up the charger and cord in a safe place where it will not be knocked, tripped over or stepped on and where it is well ventilated.
- The battery terminal not connected to the chassis must be connected first. The other connection is to be made to the chassis, remote from the battery and fuel line. The battery charger is then to be connected to the mains supply.
- After charging, disconnect the battery charger from the mains supply. Then remove the chassis connection and then the battery connection.
- **ALWAYS** unplug the charger from the power supply after charging and before carrying out any cleaning or maintenance.

4.3 Connection To The Power Supply

This appliance is supplied with an approved plug and cord for your safety.

If the power supply cord is damaged, it must be replaced by Draper Tools, an authorised service agent or similarly qualified personnel in order to avoid a hazard.

The damaged or incomplete plug, when cut from the cord, shall be disabled to prevent connection to a live electrical outlet.

This charger is a Class II  appliance and is designed for connection to a power supply matching that detailed on the rating label and compatible with the plug fitted. The value of the fuse fitted is marked on the pin face of the plug. Should the fuse need replacing, use a small plain-slot screwdriver to remove the fuse cover. Ensure the substitute is of the correct rating, approved to BS 1362 and and ASTA or BS Kite marked. This should only be performed by suitably qualified personnel.

ASTA  BSI 

Use of an extension lead is not recommended with this charger.

If an extension lead is required, use an approved and compatible lead rated for this product. Follow all the instructions supplied with the extension lead.

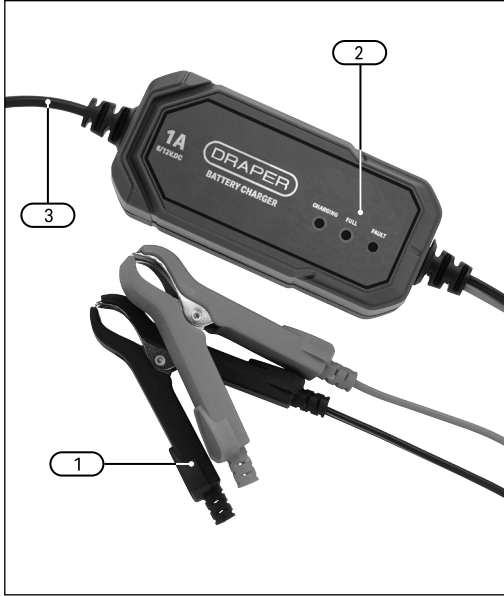
†Double insulated: This product is double insulated and does not require an earth connection to protect against electric shock from accessible conductive parts in the event of failure of the basic insulation.

4.4 Residual Risk

The safety instructions in this manual cannot account for all possible conditions and situations that may occur. Exercise common sense and caution when using this product and protect against any additional conceivable risks.

5. Identification and Unpacking

5.1 Product Overview



1. Charging leads and clamps
2. LED charging indicators
3. Power cord & plug

5.2 Packaging

Keep the product packaging for the duration of the warranty period for reference should the product need to be returned for repair.



WARNING! Keep packaging materials out of reach of children. Dispose of packaging correctly and responsibly and in accordance with local regulations.

Please visit drapertools.com for our full range of accessories and consumables.

6. Operating Instructions

Important: Before charging the battery:

- It is recommended that the battery is disconnected from the vehicle to avoid damage to the alternator.
- Check that the voltage of the battery matches that of the charger.

Note: To avoid loss of audio or security codes before disconnecting the battery connect a 12V memory saver or an EOBD 16 pin diagnostic socket type.

6.1 Connection

- Before connecting the charger to the power supply ensure that the information on the rating label matches the supply voltage.
- Refer to the instructions in the manufacturer's manual for the car, radio and navigation systems etc.
- **Notes**
 - Charging is carried out in several stages - the final maintenance charging step maintains the battery capacity at 95 – 100%.
 - The charging operation does not need to be monitored; however, it is recommended not to leave the battery unattended if charging over an extended period of time.

6.2 Charging the Battery

IMPORTANT: Read all the Health & Safety warnings and refer to your vehicle and battery instruction manual before charging a battery.

1. Release or remove the battery stopper (if fitted) from the battery.
 2. Check the acid level in the battery and top up with distilled water if necessary. **DO NOT** use tap water.
- **Important; Battery acid is aggressive**, wear protective gloves and safety glasses. Rinse off any acid splashes thoroughly with plenty of water and seek medical advice if necessary.
3. Connect the clamp leads (1) to the battery.

With Battery Removed from Vehicle

1. Connect the **RED** positive charger lead to the positive (+) terminal of the battery.
2. Then connect the **BLACK** negative lead to the negative (-) terminal of the battery.
3. Connect the charger to a power socket to switch on. The charger will automatically detect whether the battery is 6V or 12 V and start charging automatically.

With Battery Connected to Vehicle

NOTE: All loads in the vehicle must be switched off during charging.

1. Connect the **RED** positive charger lead to the positive (+) terminal of the battery.
2. Then connect the **BLACK** negative lead to the vehicle ground connection on either the engine or chassis, away from any fuel lines or battery vents.
3. Connect the charger to a power socket to switch on. The charger will automatically detect whether the battery is 6V or 12 V and start charging automatically.

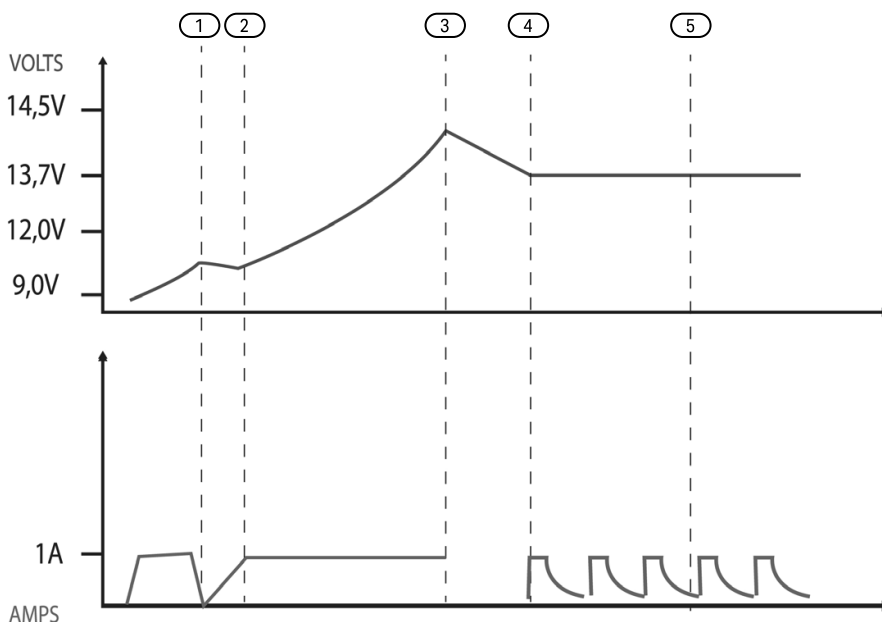
6.3 Battery Charging Indicators

Indicator Light	Meaning
Green/Charging	Light on/Charging.
Green/Full	Light on (Green charging light dim)/ Fully charged.
Red	Light flashing/Fault.

6.4 Finishing Battery Charging

1. Unplug the charger from the power supply.
2. Disconnect the black charging lead first, then disconnect the red charging lead from the positive terminal.
3. Refit the battery stoppers back into position (if removed or released).

6.5 Charging Steps



- (1) Battery type check
- (2) Soft charge
- (3) Max charge
- (4) Analysis battery
- (5) Maintenance /battery monitored

7.1 General Maintenance and Storage

Important: Always disconnect the charger from the power supply before carrying out any maintenance or cleaning.

- Wipe over the case and cord with a slightly damp cloth and dry.
- When not in use store in a safe, dry, childproof location.

 **WARNING! Servicing should only be carried out by qualified personnel.**

7.2 Troubleshooting

Fault indicator	Possible Cause	Remedy
Red 'Fault' Light on	Low voltage < 3V (6V battery); < 8V (12V battery)	Battery may be defective. Consult Draper Tools for advice.
	High voltage > 7.5V (6V battery); > 15V (12V battery)	
	Battery is short circuited.	
	Reverse polarity Clamps connected wrong way round.	Unplug and reconnect the clamps correctly.

Note: If the battery voltage is below 3V for a long period of time, the battery cannot be recharged with this charger and should be replaced.

8. Disposal

At the end of its working life, dispose of the product responsibly and in line with local regulations. Recycle where possible.

- **DO NOT** dispose of this product with domestic waste; most local authorities provide appropriate recycling facilities. 
- **DO NOT** burn or mutilate batteries; this may release toxic or corrosive substances. 

9. Warranty

The warranty period is 12 months from date of purchase - Visit drapertools.com/warranty for full details.



Read the instruction manual.



Warning! Caution!



Class II construction (Double insulated).



For indoor use only;
DO NOT expose to rain.



Protection Type.



Operating Temperature.



Reverse polarity protection.



Lead Acid Battery.



'Gel' type battery.



Absorbent Glass Mat battery.



Maintenance free battery.



WEEE – Waste Electrical & Electronic Equipment.
DO NOT dispose of Waste Electrical & Electronic Equipment in with domestic rubbish.



European conformity.



UK Conformity Assessed.

Contact Details

Draper Tools

Draper Tools Limited
Hursley Road
Chandler's Ford
Eastleigh
Hampshire
SO53 1YF
UK

Website: drapertools.com

Email: sales@drapertools.com

Product Helpline: +44 (0) 23 8049 4344

Telephone Sales Desk: +44 (0) 23 8049 4333

General Enquiries: +44 (0) 23 8026 6355

Draper Tools Europe B.V.

Oude Graaf 8
6002 NL
Weert
Netherlands

Please contact the Draper Tools Product Helpline for repair and servicing enquiries.