

Intended use

Your Black & Decker battery charger is designed to charge leadacid batteries. This product is intended for household, consumer use only.

Safety instructions

Warning! When using mains-powered appliances, basic safety precautions, including the following, should always be followed to reduce the risk of fire, electric shock, personal injury and material damage.

- Read all of this manual carefully before using the appliance.
- The intended use is described in this manual. The use of any accessory or attachment or the performance of any operation with this appliance other than those recommended in this instruction manual may present a risk of personal injury.
- Retain this manual for future reference.

Using your appliance

Always take care when using the appliance.

- This appliance is not intended for use by young or infirm persons without supervision.
- The appliance is not to be used as a toy.
- Use in a dry location only. Do not allow the appliance to become wet.
- Do not immerse the appliance in water.
- Do not open body casing. There are no user-serviceable parts inside.
- Do not operate the appliance in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.
- To reduce the risk of damage to plugs and cords never pull the cable to remove the plug from a socket outlet.

After use

- When not in use, the appliance should be stored in a dry, well ventilated place out of the reach of children.
- Children should not have access to stored appliances.
- When the appliance is stored or transported in a vehicle it should be placed in the boot or restrained to prevent movement following sudden changes in speed or direction.

Inspection and repairs

- Before use, check the appliance for damaged or defective parts. Check for breakage of parts, damage to switches and any other conditions that may affect its operation.
- Do not use the appliance if any part is damaged or defective.
- Have any damaged or defective parts repaired or replaced by an authorised repair agent.
- Never attempt to remove or replace any parts other than those specified in this manual.

Power cord safety

Warning! Never alter the ac cord or plug. If it will not fit, have a proper outlet installed by a qualified electrician. Improper connection may result in an electric shock.

Specific safety instructions for battery chargers

The following symbols are marked on the appliance:



This appliance is double insulated; therefore no earth wire is required. Always check that the power supply corresponds to the voltage on the rating plate.

Read these instructions before use:

- If the supply cord is damaged, it must be replaced by the manufacturer or an authorised Black & Decker Service
 Centre in order to avoid a hazard.
- Never attempt to charge non-rechargeable batteries.
- Have defective cords replaced immediately.
- Do not expose the battery charger to water.
- Do not open the battery charger.
- Do not probe the battery charger.
- The ON/OFF switch should be in the OFF position before connection to a power source or load, when the appliance is charging and when not in use.
- Never allow the red and black clamps to touch each other or another common metal conductor. This could cause damage to the appliance and/or create a spark/explosion hazard

Batteries

Warning! Never attempt to charge a frozen battery.

- Under extreme conditions, battery leakage may occur.
 When you notice liquid on the batteries, carefully wipe the liquid off using a cloth. Avoid skin contact.
- ◆ In case of skin or eye contact, follow the instructions below. Warning! Battery fluid is a diluted sulphuric acid and may cause personal injury or damage to property. In case of skin contact, immediately rinse with water. If redness, pain or irritation occurs seek medical attention. In case of eye contact, rinse immediately with clean water and seek immediate medical attention.
- When disposing of batteries, follow the instructions given in the section "Protecting the environment".
- Add distilled water in each cell until the battery acid reaches the level specified by the battery manufacturer. This helps to purge excess gas from the cells. Do not overfill. For a battery without cell caps (maintenance free), carefully follow the manufacturer's charging instructions.
- Study all the battery manufacturer's specific precautions, such as removing or not removing cell caps while charging, and the recommended charging rates.

 Make sure that the initial charging rate does not exceed the battery manufacturer's requirement.

Warning! Risk of explosive gas mixtures. 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 your battery charger, you read this manual and follow the instructions exactly.

- Use of an attachment not recommended or sold by Black & Decker may result in a risk of fire, electric shock, or injury to persons.
- An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and electric shock, and will void the warranty.

Personal safety

Wear complete eye protection and suitable clothing to give protection from contact with battery fluid.

Avoid touching the eyes while working with a battery. Acid, acid particles or corrosion may get into the eyes.

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 cause a severe burn.

Be extra cautious to reduce the risk of dropping a metal object onto the battery. This might cause sparks or short-circuit the battery or other electrical part, which can cause an explosion.

Preparation before charging

The appliance must only be connected to a 12V lead-acid battery. Before charging, confirm that the voltage of the battery is 12V by referring to the label on the battery or from the information available relating to its application e.g. car user manual

Do not use the appliance 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.

Warning! Explosive gas may be vented from lead acid batteries when charging. Make sure that the area is well ventilated and remove any sources of ignition when conducting charging procedures.

- Position the battery charger as far away from the battery as the leads will allow. The battery charger contains switches that may create a spark.
- Do not place the battery charger above or stand the battery charger on top of the battery.
- Explosive gases may collect near the ground. Locate the battery charger as high as possible above ground level.

- Do not use power tools in the charging area.
- Do not smoke or have a naked flame in the charging area.
- Follow the instructions for connecting and disconnecting the battery charger leads or battery terminals.

A marine (boat) battery must be removed and charged on shore. To charge it on board requires equipment specially designed for marine use. This appliance is NOT designed for such use.

Vehicles may have electrical and electronic systems (e.g. engine management systems, mobile phones) that may be damaged if subjected to high starting voltages and voltage peaks. Before connecting the appliance to the vehicle, read the vehicle's owner's manual to confirm that external charging is allowed.

- Follow these instructions and those published by the battery manufacturer and vehicle manufacturer.
- Only connect and disconnect the dc output clamps after removing the supply cord from the electric outlet. Never allow clamps to touch each other.
- Check the polarity of the vehicle battery terminals before connecting the appliance. Always disconnect the negative (black) cable first: followed by the positive (red) cable.

When charging a battery installed in the circuit follow the manufacturers instructions for accessing the battery and the following:

- Do not charge the battery while the engine is operating.
- Be aware that engine components e.g. the coolant fan may start automatically. Keep hands and body away from engine components and position the battery charger and cables to prevent contact.
- Make sure that the battery charger and the cables are located to prevent damage from closure of doors and engine compartment covers.
- Make sure that the connections can be made without touching the metal body or components adjacent to the hattery
- When using this appliance in proximity to the vehicle's battery and engine, stand the appliance on a flat, stable surface and be sure to keep all clamps, cords, clothing and body parts away from moving parts of the vehicle.
- If it is necessary to remove the battery from the vehicle to charge or to clean the terminals, make sure that all accessories in the vehicle are switched off, so as not to cause a spark.
- To reduce the risk of electric shock, disconnect the appliance from any power source before attempting maintenance or cleaning. Turning off controls without disconnecting the appliance will not reduce this risk.

Features

- 1. Charge rate selector switch
- 2. Charging indicators
- 3. Battery clamps
- 4. Ring terminals
- DC accessory plug
- 6. In-line connector

Connecting the battery charger

When all the preparations for charging and personal safety have been completed, proceed as follows:

- For most automotive and similar applications the battery charger may be connected to the battery while it is connected to the dc circuit. If this is acceptable follow the instructions given in "Charging a battery installed in the circuit"
- If the battery must be disconnected from the circuit before charging, follow the instructions given in "Charging a battery disconnected from the circuit".

Warning! A marine (boat) battery must be removed and charged on shore. To charge it on-board requires equipment specially designed for marine use.

Charging a battery installed in the circuit.

Incorrect connection, battery short circuit, location of battery and location of the battery charger may create a hazard. Make sure that adequate preparation has been made before proceeding.

Warning! If the battery posts cannot be accessed or the battery charger clamps will contact the bodywork or components adjacent to the battery, the battery must be removed before charging. Follow the manufacturer's instructions to remove the battery.

Check the polarity of the battery posts. A positive (POS, P, +) battery post usually has a larger diameter than the negative (NEG, N, -) battery post.

Follow the manufacturers' instructions to remove any insulating covers from the battery posts.

Connect the positive (red) clamp from the battery charger to the positive (POS, P, +) post of the battery.

Connect the negative (black) clamp from the battery charger to the negative (NEG, N, -) post of the battery.

When disconnecting the battery charger from the battery, always:

- Switch off and unplug the battery charger.
- Remove the negative (black) clamp first.
- Remove the positive (red) clamp last.
- Refit any insulating covers to the battery posts.

Charging a battery disconnected from the circuit.

Warning! Incorrect connection, battery short circuit, location of battery and location of the battery charger may create a hazard. Make sure that adequate preparation has been made before proceeding.

If the battery is not already removed from the circuit, follow the manufacturers' instructions to remove the battery before charging.

Check the polarity of the battery posts. A positive (POS,P, +) battery post usually has a larger diameter than the negative (NEG, N, -) battery post.

Connect the positive (red) clamp from the battery charger to the positive (POS, P, +) post of the battery.

Connect the negative (black) clamp from the battery charger to the negative (NEG, N, -) post of the battery.

When disconnecting the battery charger from the battery, always:

- Switch off and unplug the battery charger.
- Remove the negative (black) clamp first.
- Remove the positive (red) clamp last.
- Refit any insulating covers to the battery posts.

Use

Connecting the appliance with the battery clamps (fig. A)

Warning! Always disconnect the ac plug from the ac mains socket before connecting or disconnecting the appliance to or from the battery.

- Connect the battery clamps (3) to the battery charger with the in-line connector (6).
- The appliance's output leads have colour-coded battery clamps (3) (red-positive and black-negative). These connect directly to the corresponding connectors on the battery terminals.
- Follow the steps outlined in "Safety instructions" at the front of this manual
- Insert the ac plug of the battery charger into an ac mains socket.

Connecting the appliance with the ring terminals (fig. A & B)

Warning! Always disconnect the ac plug from the ac mains socket before connecting or disconnecting the appliance to or from the battery.

- Connect the ring terminals (4) to the battery charger with the in-line connector (6).
- The output leads have crimped, colour-coded ring terminals (4) (red-positive and black-negative). The ring terminals (4) connect directly to the corresponding connectors on the battery terminals.

- Remove the nuts from the bolts of the battery terminal's connectors (fig. B).
- Install the red ring terminal (4) to the bolt of the positive battery terminal connector and replace the nut.
- Install the black ring terminal (4) to the bolt of the negative terminal connector and replace the nut.
- Insert the ac plug of the battery charger into an ac mains socket

Connecting the appliance with the dc accessory plug (fig. A)

Warning! Always disconnect the ac plug from the ac mains socket before connecting or disconnecting the appliance to or from the battery.

- Connect the dc accessory plug (5) to the battery charger with the in-line connector (6).
- Insert the dc accessory plug (5) into the vehicle's dc accessory outlet.
- Insert the ac plug of the battery charger into an ac mains socket.

Charging Indicators

The appliance has three charging indicators (2):

- Red LED bad connection, the battery is not able to accept charge or a reverse polarity connection has been detected.
- Yellow LED good connection and the battery is charging.
- Green LED the battery is fully charged.

When the appliance is properly connected, the yellow LED will illuminate, indicating that the smart circuit is functioning to assess the status of the battery. This procedure may take up to 2 minutes if the battery voltage is lower than 12.8 Volts.

The appliance is fully automatic; it will power on when needed and power off when the battery is fully-charged.

The appliance has built-in circuit protection which guards against overcharging or short circuits.

Charging the battery (fig. C)

- Slide the charge rate selector switch (1) to the 1A or 2A position as required.
- Leave the appliance on.
- Monitor the battery from time to time.

Note: A clicking sound may occur during the charging process, this is normal.

- When the green LED is lit, the battery is fully charged, slide the charge rate selector switch (1) to the 0 position.
- Remove the ac plug from the ac mains socket.
- Remove the charging leads from the battery.

Troubleshooting

If the appliance is not charging:

- Check that the battery charger is properly connected to a live 230 Vac outlet (the yellow LED will illuminate).
- Check that the correct charging rate has been selected for the battery being charged.
- If the voltage of the battery to be charged has fallen below 4 Volts, the battery cannot be charged with this battery charger.

Maintenance

 Your Black & Decker appliance has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper care and regular cleaning of your appliance.

Warning! Before performing any maintenance or cleaning on the appliance, unplug the appliance.

 From time to time wipe the appliance with a damp cloth. Do not use any abrasive or solvent-based cleaner. Do not immerse the appliance in water.

Replacing the fuse in the dc accessory plug

- Remove the gold cap by turning it counter clockwise.
- Remove the rubber washer, centre pin and the spring.
- Remove the fuse.
- Fit a new fuse of the same type and size (5 A).
- Install the centre pin, spring and rubber washer.
- Install the gold cap by turning it clockwise onto the plug.

Mains plug replacement (U.K. & Ireland only)

If a new mains plug needs to be fitted:

- Safely dispose of the old plug.
- Connect the brown lead to the live terminal in the new plug.
- Connect the blue lead to the neutral terminal.

Warning! No connection is to be made to the earth terminal. Follow the fitting instructions supplied with good quality plugs. Recommended fuse: 3 A.

Protecting the environment



Should you find one day that your appliance needs replacement, or if it is of no further use to you, think of the protection of the environment. Black & Decker repair agents will accept old Black & Decker tools and ensure that they are disposed of in an environmentally safe way.



Separate collection of used products and packaging allows materials to be recycled and used again. Re-use of recycled materials helps prevent environmental pollution and reduces the demand for raw materials.

Local regulations may provide for separate collection of electrical products from the household, at municipal waste sites or by the retailer when you purchase a new product. Black & Decker provides a facility for the collection and recycling of Black & Decker products once they have reached the end of their working life. To take advantage of this service please return your product to any authorised repair

You can check the location of your nearest authorised repair agent by contacting your local Black & Decker office at the address indicated in this manual. Alternatively, a list of authorised Black & Decker repair agents and full details of our after-sales service and contacts are available on the Internet at: www.2helpU.com.

agent who will collect them on our behalf.

Technical data

		BDV080
Input voltage	Vac	230
Rated input	W	35
Output voltage	Vdc	12
Output current	А	1&2
Weight	kg	0.5

EC declaration of conformity

RDV080

Black & Decker declares that these products conform to: Standards & Legislation.

73/23/EEC. 89/336/EEC. EN60335, EN61000, EN55014

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Guarantee

Black & Decker is confident of the quality of its products and offers an outstanding guarantee. This guarantee statement is in addition to and in no way prejudices your statutory rights. The guarantee is valid within the territories of the Member States of the European Union and the European Free Trade Area.

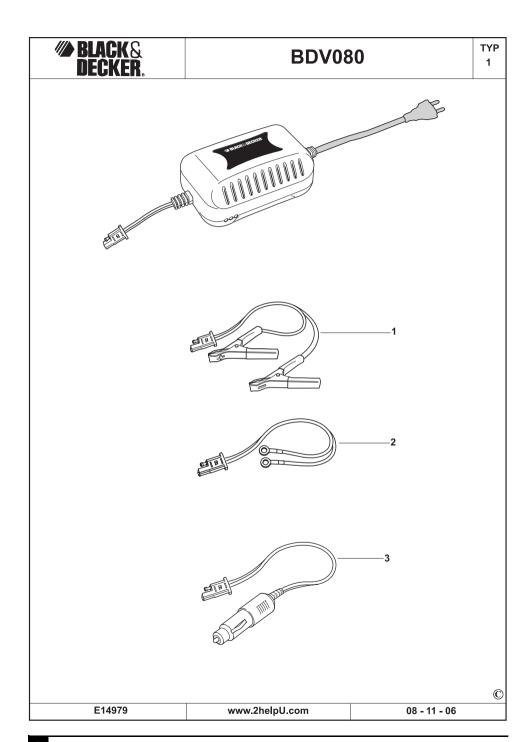
If a Black & Decker product becomes defective due to faulty materials, workmanship or lack of conformity, within 24 months from the date of purchase, Black & Decker guarantees to replace defective parts, repair products subjected to fair wear and tear or replace such products to make sure of the minimum inconvenience to the customer unless:

- The product has been used for trade, professional or hire purposes.
- The product has been subjected to misuse or neglect.
- The product has sustained damage through foreign objects, substances or accidents.
- Repairs have been attempted by persons other than authorised repair agents or Black & Decker service staff.

To claim on the guarantee, you will need to submit proof of purchase to the seller or an authorised repair agent. You can check the location of your nearest authorised repair agent by contacting your local Black & Decker office at the address indicated in this manual. Alternatively, a list of authorised Black & Decker repair agents and full details of our aftersales service and contacts are available on the Internet at:

www.2helpU.com

Please visit our website **www.blackanddecker.co.uk** to register your new Black & Decker product and to be kept up to date on new products and special offers. Further information on the Black & Decker brand and our range of products is available at **www.blackanddecker.co.uk**.



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