



FOR INDOOR USE ONLY

Power Details:

Input: 230-240Vac; 50Hz; 52W

Output: 12V DC; 2.8A

Maximum Charge Rate: 4A RMS

Read these instructions before operating this car battery charger and retain for future reference.

SAFETY:

1. GASES:

When the battery is being charged you may notice bubbling in the fluid caused by the release of gas. As the gas is flammable no naked lights should be used around the battery, and the area should be kept well ventilated.

2. REVERSE POLARITY PROTECTION:

In order to protect the charger from anyone incorrectly connecting the positive lead to the negative terminal or vice versa, the battery charger contains a temperature-sensitive PPTC resettable fuse. In case the fuse breaks upon short circuit, overload or reverse polarity, the charger will self-repair.

3. TYPES OF BATTERIES:

This charger is only suitable for lead acid batteries and should not be used to recharge any other type of battery.

4. IMPORTANT:

When not in use, the battery charger must be kept in a dry area to avoid moisture damaging the transformer.

Your battery charger is meant for INDOOR USE ONLY. Keep away from liquids at all times.

The mains supply cord of this appliance cannot be replaced; if the cord is damaged, the appliance should be discarded.

5. **DANGER:**

Avoid getting electrolyte on your skin or clothes. It is acidic and can cause burns. If this occurs you should rinse the affected area with water immediately.

INSTRUCTIONS FOR USE:

1. CHARGING YOUR CAR BATTERY

It is essential to disconnect the battery from the car. This will avoid possible damage to the alternator.

To avoid damage to the bodywork from possible spillage it is advisable to remove the battery completely.

2. PREPARATION OF THE BATTERY

Firstly remove the caps from each cell and check that the level of liquid is sufficient in each cell. If it is below the recommended level, top up with ionized, or distilled water.

UNDER NO CIRCUMSTANCES SHOULD TAP WATER BE USED.

The cell caps should not be replaced until charging is complete. This allows any gases formed during charging to escape. It is inevitable that some minor escape of acid will occur during charging.

If your battery is permanently sealed it is not necessary to carry out these checks.

3. CONNECTIONS

Connect the crocodile clips to the battery in the following order:

a) Connect the positive charging lead (RED) to the positive terminal post of the battery (marked P or +).

b) Connect the negative lead (BLACK) to the negative post of the battery (marked N or -).

It is important to ensure that both crocodile clips are making good contact with their respective terminal posts.

4. CHARGING

Insert the power plug into the mains supply. Your battery charger should now be charging and the power LED (Red) and the charging LED (Yellow) on the front of the charger will be lit.

When a flat battery is initially connected to the battery charger the Full LED lamp should not be lit. When the battery is fully charged the Full LED (green) will be lit.

N.B. If you have not connected the crocodile clips to the battery when you turn on the mains power the "Full" lamp will light up. Similarly, if you disconnect the clips from the battery without switching off the mains power, the lamp will stay lit. **THIS IS NOT A FAULT.** If you now connect the clips to a battery the "Full" lamp will go out, unless the battery is fully charged.

PLEASE NOTE HOWEVER FOR REASONS OF SAFETY YOU SHOULD ALWAYS CONNECT AND DISCONNECT THE CROCODILE CLIPS TO THE BATTERY WITH THE MAINS POWER OFF.

5. ELECTROLYTE

Regularly check the specific gravity of the liquid, using a hydrometer, until a reading of "Fully charged" or 1.250 is reached. A charging time of no more than 10 hours is recommended for batteries of 34-45 ampere hour's capacity.

6. WHEN CHARGING IS COMPLETE

Switch off the mains supply, unplug the charger, and disconnect the leads from the battery posts. Inspect the liquid levels in each cell and top up if necessary, using the correct fluid. Now replace the caps. Any surplus fluid around the cell tops should be wiped off (this should be done with extreme care as it may be acidic).

If the battery has been removed for charging, replace it and reconnect the cables.

CAR BATTERY MAINTENANCE

It is essential to keep your battery regularly charged up throughout the year, especially during the winter months.

In the winter the effectiveness of your car battery is reduced by the cold. Oil is thick, engines are difficult to start and the heater, windscreen wipers and lights are all draining power. It is at this time that batteries have to be at peak power. If your battery is not regularly maintained and kept fully charged, it can cause problems and a possible breakdown.

Listed are some helpful hints on how to keep your battery healthy in conjunction with your battery charger.

FAULTY CELLS

Batteries are usually made with six cells. Any of these cells can deteriorate or get damaged. If after several hours charging your battery is still flat, you should test the battery. Take hydrometer readings from each cell in the battery. If one reading is lower than the others this could indicate a faulty cell. If necessary, get a car electrician to check your battery. One faulty cell is enough to ruin your battery and you should have it replaced.

CARE

Sometimes the battery may appear flat, but this could simply be dirty or loose connections on your battery terminals. It is important to maintain the leads on a regular basis. Do this by removing the leads from the battery, cleaning the inside of each connector and the terminal posts on the battery. Coat the terminal posts with readily available gels for this purpose. Replace the connectors and tighten firmly.

It is essential to keep the electrolyte level above the plates. However, you should not overfill it as the electrolyte is strongly acidic.

When topping up DO NOT USE TAP WATER. Always use distilled or ionised water.

It is important to keep the acid level topped up, if necessary have it checked by your garage.

CHECKING THE CONDITION OF YOUR BATTERY

Using a hydrometer which can be purchased from most car accessory stores, you can check the specific gravity of the electrolyte in each cell. The hydrometer is used to suck up a quantity of fluid

from the cell. The weighted float inside the hydrometer will register the condition of that cell. Put the fluid back into the cell after testing, taking care not to splash the fluid about. Always wash out the hydrometer after use.

FAQs

If the "POWER" LED fails to light:

- Switch off immediately at the mains.
- After switching off the mains supply, switch on and check again.
- Ensure the leads are not damaged.

If the panel lights flicker and go out:

- Switch off immediately at the mains.
- Ensure that the output leads are not touching.
- Check to see that the positive and negative leads are connected to the correct terminals.

Important Notice

If the "Power" and "Full" LEDs are illuminated and there is no output charge to your battery, please check if your battery is defective.

SAFETY INSTRUCTIONS:

WHEN USING ELECTRICAL APPLIANCES, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED:

- READ ALL INSTRUCTIONS BEFORE USE.
- TO PROTECT AGAINST ELECTRIC SHOCK, DO NOT IMMERSE CORD, PLUG OR APPLIANCE, IN WATER OR ANY OTHER LIQUID.
- UNPLUG FROM OUTLET WHEN NOT IN USE AND BEFORE CLEANING.
- DO NOT OPERATE ANY APPLIANCE WITH A DAMAGED CORD OR PLUG OR AFTER THE APPLIANCE MALFUNCTIONS, OR HAS BEEN DAMAGED IN ANY MANNER. WE RECOMMEND THAT THE POWER CORD IS NOT KINKED OR STORED IN A TWISTED MANNER, AND THAT YOU REGULARLY CHECK ITS CONDITION.
- THE USE OF ANY ACCESSORY ATTACHMENTS NOT RECOMMENDED BY COOPERS OF STORTFORD MAY CAUSE INJURIES AND INVALIDATE ANY WARRANTY YOU MAY HAVE.
- DO NOT USE OUTDOORS.
- DO NOT LET CORD HANG OVER THE EDGE OF A TABLE OR COUNTER, OR TOUCH HOT SURFACES.
- DO NOT PLACE ON OR NEAR HEAT SOURCES.
- USE ON A LEVEL, STABLE SURFACE.
- **DO NOT** COVER THE ITEM IN ANY WAY WHEN IN USE AS THIS MAY CAUSE OVERHEATING.
- DO NOT USE THIS APPLIANCE FOR ANY OTHER USE THAN THE INTENDED USE IT IS DESIGNED FOR.
- ENSURE THERE IS SUFFICIENT DISTANCE BETWEEN THIS APPLIANCE AND OTHER ITEMS ON THE WORK SURFACE OR WORK STATION, OR SUFFICIENT DISTANCE BETWEEN THE

APPLIANCE AND THE CONFINES OF THE AREA IN WHICH IT IS SITUATED. WE RECOMMEND A MINIMUM CLEARANCE AROUND ALL FACES OF AT LEAST 10CM.

- BEFORE USE, CHECK THOROUGHLY FOR ANY DEFECTS AND DO NOT USE IF DEFECTS ARE FOUND. TAKE CARE NOT TO DROP THE APPLIANCE AS HEAVY IMPACTS MAY CAUSE INTERNAL DAMAGE.

PLUG WIRING (UK & IRELAND)

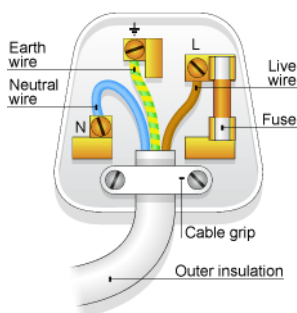
This appliance is fitted with a BS 1363 13-amp plug. If you have to replace the fuse, only those that are ASTA or BSI approved to BS1362 and with a rated current of 13-amps should be used. If there is a fuse cover fitted, this cover must be re-fitted after changing the fuse. If the fuse cover is lost or damaged the plug must not be used. Spare fuse holders and fuses are available from electrical outlets. If the socket outlets in your home or office are not suitable for this product's plug, the plug must be removed and disposed of safely. Attempts to insert the plug into the wrong socket is likely to cause electric hazard. A replacement plug should be wired according to the following instructions:

The cable

A mains electricity cable contains two or three inner wires. Each has a core of copper and an outer layer of flexible plastic. This product is double insulated; the wires in the cord set are colour coded in the following way:

BLUE	NEUTRAL
BROWN	LIVE
GREEN & YELLOW	EARTH

The diagram below shows the key features of a correctly wired three-pin mains plug.



Note:

Double insulated appliances do not need the green & yellow Earth wire. They may only have the Brown and Blue wires.

The mains supply cord of this appliance cannot be replaced; if the cord is damaged, the appliance should be discarded.

DISPOSAL

- Dispose of all packaging, paper, cartons, plastic and plastic bags in accordance with your local recycling regulations.
- At the end of the product's lifespan please dispose of it at an authorised household WEEE waste recycling centre.

