

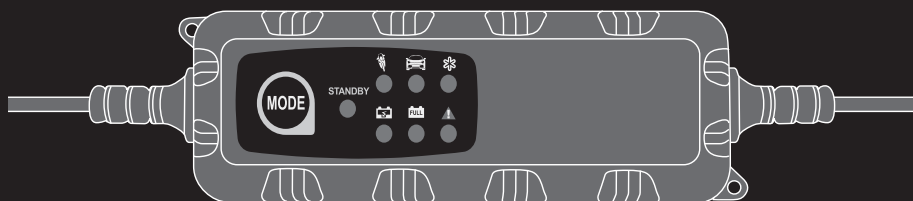
# COJTECH®



**Important!**

Read the entire instruction manual carefully and make sure that you fully understand it before you use the equipment. Keep the manual for future reference.

## Battery charger



**ART.NO**      **MODEL**  
**18-2692**    **CB5-5L-BS1**

Ver. 201209  
Original instructions

ENGLISH

SVENSKA

NORSK

SUOMI



# Battery charger

ART.NO 18-2692 MODEL CB5-5L-BS1

Please read the entire instruction manual before use and save it for future reference. We reserve the right for any errors in text or images and for making any necessary technical changes to this document. If you should have any questions concerning technical problems please contact our Customer Services.

## 1. Safety

- This product must not be used by anyone (including children) suffering from physical or mental impairment. This product should not be used by anyone without sufficient experience or knowledge if they have not been instructed in its use by someone who will take responsibility for their safety.
- Never let children play with the product.
- **Warning!** Lead-acid batteries contain corrosive battery acid. If the acid comes into contact with skin or eyes immediately rinse with lots of water and contact your doctor at once.
- **Warning!** Never attempt to charge batteries that cannot be charged!
- Intended for use indoors.
- The charger is intended only for charging lead-acid batteries of the type: WET, GEL, AGM etc. Charging other battery types can damage the charger, battery or other property.
- The battery charger is not intended as a power-supply for other products.
- Do not attempt to charge dry-cell batteries as they may explode and cause damage.
- Do not use the charger if the mains cable is damaged. If the mains cable is damaged and has to be replaced, to avoid any risk it must either be replaced by the manufacturer, his/her service department or other qualified personnel.
- Do not operate the battery charger if the casing is damaged. To avoid any risk repairs should be carried out by qualified personnel.
- Do not place the charger near batteries that are charging. The battery emits a gas which can corrode the charger. Place the charger as far away from the battery as the charger cables reach.
- Do not disassemble or modify the charger in any way.
- Make sure the charging clamps do not come in contact with each other when charging.
- First remove the plug before removing the charging clamps from the battery.
- Wear protective goggles and turn your face away when connecting the charger clamps.
- The battery can emit combustible gases when charging. That is why it is important to avoid sparks near the battery. Make sure that the charging clamps do not come into contact with each other. Avoid smoking near the battery when charging.
- Never cover the charger.
- Ensure good ventilation when charging.
- The battery charger may only be used by someone who has read and understood the manual.
- A frozen battery must never be charged. Bring it indoors and let it defrost first.

## 2. Product description

- Automatic battery charger for 12 V lead batteries.
- Intended for use with lead batteries (WET, GEL, AGM etc.) with a capacity of 1.2 Ah to 120 Ah.
- Protection against spark emissions and short circuiting.
- LED indicates charging status and incorrect connection.
- Protection against damp and dust - IP65.
- Charging at 0.8/4 A.
- Switches automatically to maintenance charging when the battery is fully charged.
- Insulated battery clamps with quick-connector pole clamps.




## 3. Use

### Attention!

Read the vehicle's manual before commencing charging or loosening a battery cable. Check if there are any particular instructions for charging batteries in your vehicle.

1. Always remove the power supply plug from the wall socket before connecting the charging clamps to the battery.
2. Check that the battery can be charged before charging commences. The capacity of the battery ought to be between 1.2 Ah and 120 Ah. Clean the battery terminals if necessary. Use protective goggles when cleaning.
3. Connect positive (RED) battery clamp to the battery's positive terminal (+) and negative (BLACK) battery clamp to the battery's negative terminal (-).

**Note:** When charging a battery that is mounted to a vehicle, mount the cables in the following order:

- a.) Connect the charger's red plus clamp to the battery's positive terminal (+).
  - b.) Connect the battery's negative black clamp somewhere on the vehicle's chassis. This area should be a fair distance away from the battery itself and any fuel lines.
  - c.) Connect the charger to a power point.
4. Connect the power supply plug to a socket when **STANDBY** flashes.
  5. Press [MODE] several times to select the desired charge setting. In this order:
    - **STANDBY**
    - Charge setting 1 <14 Ah 
    - Charge setting 2 >14 Ah 
    - Charge setting 3 COLD 
    - **STANDBY** etc.
  6. The LED on the charger shows the charging status.
  7. Interrupt charging in the correct way. Do as follows:
    - a.) First remove plug from the socket.
    - b.) Then remove the charger clamp connected to the minus terminal (-) (or to the chassis).
    - c.) Lastly remove the charger clamp connected to the plus terminal (+).
  8. Once charging is complete, remove the charger clamps from the vehicle in the following order:
    - a.) Remove the mains lead from the power point.
    - b.) Remove the charger's black clamp from the chassis.
    - c.) Remove the charger's red plus clamp from the battery's positive terminal (+).

## 4. Functions






### 4.1 Re-setting

When the charger is connected to an electric socket it is automatically reset and charging does not commence until you have started the charger manually.

### 4.2 <14 Ah – Charge setting 1

**Suitable for motorcycle batteries and other smaller batteries (14.4 V/0.8 A).**






Setting 1 is to be used for batteries with a lower capacity than 14 Ah. Connect the charging clamps to the battery (red to + and black to -), then press [MODE] to select the desired function and start charging.

-  flashes. If you do not press any button  will light up and charging will commence at 0.8 A ( $\pm 10\%$ ).
- If everything is OK  will light up during the entire charging cycle until the voltage reaches 14.4 V ( $\pm 0.25$  V).
- When charging is complete  will switch off and  will be lit. Charging will switch to conservation charging.

### 4.3 >14 Ah – Charge setting 2

**Suitable for car batteries, regular batteries etc. (14.4 V/4 A).**






Setting 2 is to be used for batteries with a higher capacity than 14 Ah. Connect the charging clamps to the battery (red to + and black to -), then press [MODE] to select the desired function and start charging.

-  flashes. If you do not press [MODE] again  will light up and charging will commence at 4 A ( $\pm 10\%$ ).
- If everything is OK  will light up during the entire charging cycle until the voltage reaches 14.4 V ( $\pm 0.25$  V).
- When charging is complete  will switch off and  will be lit. Charging will switch to maintenance charging.

### 4.4 COLD – Charge setting 3

**Suitable for large batteries or if charging commences at low temperatures (14.7 V/4 A).**




Setting 3 is to be used for batteries with a much higher capacity than 14 Ah (or if commences at low temperatures). Connect the charging clamps to the battery (red to + and black to -), then press [MODE] to select the desired function and start charging.

-  flashes. If you do not press [MODE] again  will light up and charging will commence at 4 A ( $\pm 10\%$ ).
- If everything is OK  will light up during the entire charging cycle until the voltage reaches 14.7 V ( $\pm 0.25$  V).
- When charging is complete  will switch off and  will be lit. Charging will switch to maintenance charging.

## 4.5 Reconditioning of battery (pulse charging) (7.5 V to 10.5 V)

The charger automatically enters this setting for weak batteries and which do not respond to normal charging. Connect the charging clamps to the battery (red to + and black to -), then press [MODE] to select the desired function and start charging. The charger automatically detects the battery's voltage. If the voltage is 7.5 V ( $\pm 0.5$  V) to 10.5 V ( $\pm 0.5$ ) pulse charging commences until the voltage reaches 10.5 V ( $\pm 0.5$  V) and then the charger switches over to the charge setting you selected when charging began.

**NOTE:** The charger cannot charge batteries that have a lower pole voltage than 7.5 V ( $\pm 0.5$  V).

- When everything is OK  will light up during the entire charging cycle until the voltage reaches 14.4 V ( $\pm 0.25$  V).
- When charging is complete  will switch off and  will be lit. Charging will switch to maintenance charging.
- Weak batteries can often be recharged using this method.

## 4.6 Protection features

The charger has a protection features which switch the charger off automatically in the event of:

- Reversed polarity
- Low voltage in batteries (under 7.5 V  $\pm 0.5$  V)
- Short circuiting
- Charging clamps are not connected

If the battery is connected with reversed polarity, the  lamp lights up.

## 4.7 Temperature protection

The charger has a protection feature which reduces charging automatically if the temperature in the charger gets too high. The charging current returns to normal when the temperature is reduced.

## 4.8 Switch between charging settings 1 (<14 Ah) – 2 (>14 Ah) – 3 (COLD)

Press [MODE] several times to select the desired charge setting. In this order:

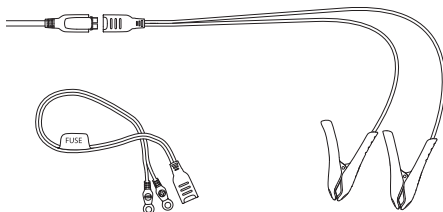
**STANDBY – Charge setting 1 - Charge setting 2 - Charge setting 3 – STANDBY** etc.

**Attention!** If the battery is fully charged, continue maintenance charging even if the user selects another charge setting. The protection feature prevents over-charging of the battery.







# 5. Using the quick connectors

Perfect accessory for hard to access batteries on e.g. motorbikes, lawnmowers, etc.

1. Screw on the positive (RED) battery clamp to the battery's positive terminal (+) and the negative (BLACK) to the battery's negative terminal (-).
2. Position the quick-connector in an easy accessible area to make it easy to connect a charger when needed.



## 6. The LED displays

Display	Charge setting	Note
STANDBY	Charging has not commenced	Connection error, no charging
	Setting 1, low charge	Setting 1 (14.4 V/0.8 A)
	Setting 2, high charge	Setting 2 (14.4 V/4 A)
	Setting 3, high charge	Setting 3 (14.7 V/4 A)
	Connection error	Incorrect polarity, check
	Charging	Charging commenced
	Conservation charging	Battery fully charged

## 7. Care and maintenance

Cleaning: Remove plug from socket and wipe the device with a soft cloth and possibly a mild cleaning solution. Never use abrasive cleaners or solvents.

## 8. Disposal

When you dispose of the product it should be done in accordance with local regulations. If you are unsure of how to proceed, please contact the local authorities.

## 9. Specifications

<b>Power supply</b>	220–240 V AC, 50/60 Hz
<b>Effect</b>	0.7 A RMS (65 W)
<b>Discharging</b>	< 5 mA (not connected to 230 V AC)
<b>Max voltage charge</b>	14.4 V ( $\pm 0.25$ V) or 14.7 V ( $\pm 0.25$ V)
<b>Charging</b>	4.0 A ( $\pm 10$ %) or 0.8 A ( $\pm 10$ %)
<b>Ripple</b>	150 mV (max)
<b>Battery types</b>	12 V chargeable lead batteries with capacity 1.2 Ah to 120 Ah
<b>Sealing</b>	IP65
<b>Noise</b>	< 50 dB (test at distance of 500 mm)
<b>Dimensions</b>	180 × 60 × 45 mm
<b>Weight</b>	0.5 kg



## SVERIGE

---

**KUNDTJÄNST**      Tel: 0247/445 00  
                         Fax: 0247/445 09  
                         E-post: kundservice@clasohlson.se

**INTERNET**            www.clasohlson.se

**BREV**                    Clas Ohlson AB, 793 85 INSJÖN

## NORGE

---

**KUNDESENER**      Tlf.: 23 21 40 00  
                         Faks: 23 21 40 80  
                         E-post: kundesenter@clasohlson.no

**INTERNETT**            www.clasohlson.no

**POST**                    Clas Ohlson AS, Postboks 485 Sentrum, 0105 OSLO

## SUOMI

---

**ASIAKASPALVELU**    Puh.: 020 111 2222  
                         Sähköposti: info@clasohlson.fi

**INTERNET**            www.clasohlson.fi

**OSOITE**                Clas Ohlson Oy, Annankatu 34-36 A, 00100 HELSINKI

## UNITED KINGDOM

---

**Customer Service**    Contact number: 08545 300 9799  
                         E-mail: customerservice@clasohlson.co.uk

**Internet**                www.clasohlson.com/uk

**Postal**                    10 – 13 Market Place  
                         Kingston Upon Thames  
                         Surrey  
                         KT1 1JZ