

# CAR BATTERY CHARGER User Guide

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# **After Sales Support**

Specially made for ALDI Stores to our stringent quality speci cations. If you are not entirely satis ed with this product, please return it to your nearest ALDI store within 60 days from the date of purchase for a full refund or replacement, or take advantage of our after sales support by calling the Customer Service Hotline.





# **Guarantee conditions**

### Dear customer,

What your 1 year warranty means

Great care has gone into the manufacture of this product and it should therefore provide you with years of good service when used properly. In the event of product failure within its intended use over the course of the first 1 year after the date of purchase, we will remedy the problem as quickly as possible once it has been brought to our attention.

In the unlikely event of such an occurrence, or if you require any information about the product please contact us via our sales support services, details of which can be found in this manual and on the product itself.



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# Scope of supply

- Battery charger CPL-2054
- Operating Instructions with warranty information

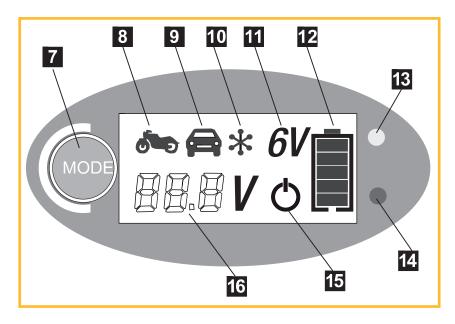
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# **Part description**

- 1. Vehicle battery charger CPL-2054
- 2. Operating panel
- 3. Mains cable
- 4. Battery clamp black / negative terminal (-)
- 5. Battery clamp red /positive terminal (+)
- 6. Charging cable





- 7. Mode key for selecting the charging program (except for 6 V as it is automatically detected)
- 8. Motorcycle charging program: for batteries 12 V, 1.2 Ah-14 Ah
- 9. Car charging program: for 12 V, 14 Ah-120 Ah
- 10. Cold weather charging program: for batteries 12 V, 14 Ah-120 Ah
- 11. 6 V charging program: for batteries 6 V, 1.2 Ah-14 Ah
- 12. Battery charging status display (charging: bars partially filled, frame flashing; fully charged: bars filled, frame lit permanently)
- 13. Mains light: green light lit when connected to mains
- 14. Fault light: lights up red in case of incorrect polarity, short-circuit and overheating.
- 15. Symbol for standby mode
- 16. Battery voltage display: shows current voltage of connected battery.

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# **Safety instructions**

- A The warning triangle identifies all instructions important for ensuring safe use. Always follow these Instructions as failure to do so may result in injuries or may damage the charger.
- i The information symbol highlights useful information

#### 2.1 Correct use

- This charger is only intended for use with lead-acid batteries (vehicle batteries) with 6V and 12V rated voltage (see details in Technical Specification). The charger may not be used for other types of batteries as high charging currents can cause a hazard.
- The charger may not be used as a starting aid. Prior to starting the vehicle, always fully charge the battery of the vehicle and disconnect the charger as described in these Instructions.
- The charger is designed for use in a dry and protected environment at temperatures of -5 to +40 °C.

### 2.2 General Safety Instructions

- The charger is not designed to be used by persons (including children) with impaired physical, sensory or mental ability, lack of experience and/or lack of know-how, unless they are supervised by another person responsible for their safety or unless they have been instructed in how to use the charger.
- Children must be supervised to prevent them from playing with the charger.
- Only connect the charger to a correctly installed socket. The voltage must correspond to the one specified on the rating plate of the charger.
- Ensure that the mains cable is not damaged and keep away from sharp edges, humidity, heat or oil.
- Do not connect the charger if the mains cable is damaged. A damaged mains cable must be replaced immediately by central Service Centre staff or similar qualified persons, in order to prevent any hazards.
- Do not operate charger or unplug from mains immediately if the charger is damaged or if you suspect that the charger is faulty. In these cases have the charger repaired by our Service Engineers.
- Remove plug from mains if charger is not in use.
- Keep packaging material and, in particular foil and foil bag, away from children danger of suffocation.
- Prior to starting the charger, remove all protective foil from the charger.
- Install the mains cable in such a way that it does not cause an obstruction and nobody can pull on the cable accidently.

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#### 2.3 Special safety instructions

- Store the charger and accessories out of children's reach.
- Only connect the charger to an easily accessible 240 V socket so that you can take quick action in the case of a fault.
- Do not cover the charger as it could overheat and thus be damaged.
- Where the battery is installed in a vehicle, ensure that the vehicle is switched off and is secured in a stationary position. Switch off the ignition and make sure the vehicle is parked applied handbrake (e.g. car) or secured cable.
- Avoid electric short-circuiting when connecting the charger to the battery.
- Only connect the negative terminal cable to the negative terminal of the battery or to the chassis. Only connect the positive terminal cable to the positive terminal of the battery.
- Only touch the insulated area of the terminal clamps (positive terminal and negative terminal.
- Prior to installation, maintenance or repair disconnect charger from mains.
- Do not expose charger to open fire, heat or prolonged high temperatures of +40°C. At higher temperatures, the output of the charger is automatically reduced.

#### 2.4 Working environment

- Never expose the charger to rain or humidity. The device must not come into contact with water, not even dripping or spray water.
- Only use the charger at an ambient temperature of between -5 to +40 °C.
- Do not expose the charger to strong sunlight for a longer period of time.
- CAUTION: Avoid explosive gasses, flames and sparks. Ensure adequate ventilation during charging. The battery can emit gaseous hydrogen during charging and discharging. Contact with a naked flame can lead to a highly explosive reaction.
- Carry out the charging operation in a well-ventilated, weather-protected room.
- Ensure that explosive or combustible substances such as fuel or solvents cannot be set alight when using the charger.



#### 2.5 Use of rechargeable batteries

- Do not use the charger for charging or discharging batteries that are not rechargeable.
- Do not attempt to recharge any battery that could be frozen. Do not use any damaged or corroded rechargeable batteries.
- Never take apart, open or crush rechargeable cells or batteries.
- Never expose cells or batteries to high temperature or fire. Avoid direct sunlight.
- Never short-circuit cells or batteries.
- Observe that a highly explosive gas mixture is produced when charging batteries. Danger of explosion if used incorrectly. Consequently observe the following: fire, sparks, naked flames and smoking are prohibited near a rechargeable battery.
- Ensure that the use of electric cables and electric equipment neither produces sparks nor an electrostatic discharge.
- Caution, risk of chemical burns. Battery acid is highly corrosive. Use acid-resistant protective gloves, clothes and goggles. Do not tilt batteries as acid could run out of the ventilation holes.
- If a cell has started to leak, the liquid must neither come into contact with the skin nor with the eyes. If contact is made, the affected area should be rinsed with a lot of water for a considerable time. Also consult your doctor.
- Remove spilled battery fluid with a dry, absorbent cloth and avoid contact with the skin by wearing acid-resistant protective gloves.
- The positive (+) and negative (-) symbols on the cells, batteries and charger must be observed. The correct connection must be ensured.
- Store cells and batteries out of reach of children.



# Operation

### 3.1 Operation

The car battery charger CPL-2054 automatically recognises the connected type of battery (6 V-or 12 V battery).

If the battery terminals are connected incorrectly (polarity reversal), the red fault light will light up

In the event of overheating or a short-circuit during operation, the red fault light also lights up. The charger reverts to standby mode.

Charging only commences once a program has been selected with the MODE key. If the charger is connected to a 6 V battery, only the 6V program can be activated via the MODE key. Other settings are not possible. If the charger is connected to a 12 V battery, the MODE key allows the selection of programs  $\delta_{\mathbf{m}}$ ,  $\boldsymbol{\Box}$  and  $\boldsymbol{k}$ .

During charging, the displays shows the selected charging program, the current battery voltage, the charging status and the charging process by the number of bars in the battery symbol and the flashing frame of the battery symbol.

# 3.2 Connecting the charger



#### Caution

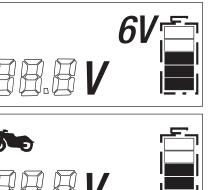
Always ensure that you connect the battery to the charger before connecting the mains plug.



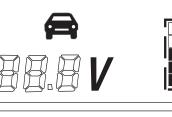
#### Caution

Explosion hazard due to gas. Highly explosive gas can be produced during charging of lead-acid batteries. Only charge batteries in well ventilated areas.

# immediately.



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**CPL-2054** 

## Charging battery outside of vehicle

First connect the red battery terminal of the battery cable to the positive terminal of the battery (marked +).

Then connect the black battery terminal of the charging cable to the negative terminal of the battery (marked -).



Note

If the polarity of the terminals is reversed (mixed up positive and negative terminal) the red fault light on the charger lights up immediately.



Caution Never connect the charger to the mains if the red fault light is on.

Next, connect the battery charger by plugging the mains plug into the mains socket. (240V~50/60Hz)

### Charging with battery in vehicle



Note

Generally, the negative terminal of batteries in cars is connected to the chassis. There are, however, also exceptions. You should therefore first check which battery terminal, (+ or -) of your vehicle is directly connected to the chassis. The sequence of correctly attaching the battery clamps depends on this.

Determine which battery terminal is not directly connected to the chassis (+ or-). Connect the respective terminal clamp of the charging cable (red terminal POSITIVE / +, black terminal NEGATIVE / -) to this battery terminal.

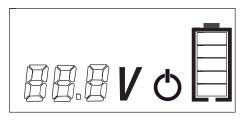
Using the remaining terminal clamp of the battery charging cable, create a connection to the vehicle. Clamp to a bolt or blank metal, as far away from the battery and fuel pipe as possible.



#### 3.3 Starting the charging process

After connecting the charger to the mains, the standby symbol, an empty battery symbol and the currently measured battery voltage appear on the display.

Use the MODE (7) key to select the suitable charging program for the battery and start the charging process.





Note

The charger automatically detects the type of battery connected (6 V or 12 V battery).

There is only one charging program for 6 V batteries.

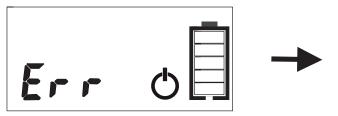
For 12 V batteries the MODE key allows selection from the programs  $\delta \sim$ ,  $rac{12}{4}$  and  $\frac{1}{2}$ .

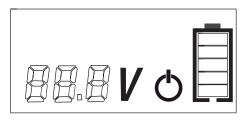
#### Automatic detection of battery

As soon as the battery charger has been connected to the mains, the green mains light (13) lights up on the charger.

The charger recognizes the battery based on the following criteria:

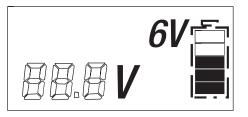
If the battery voltage is lower than 3.8 V or higher than 15 V, the battery is not suitable or defective. The error message "Err" appears for 3 seconds on the display before returning to the standby mode.





#### 6 V battery

If the battery voltage is between 3.8 and 7.3 V, the battery is identified as a 6 V battery. By pressing the MODE key (7) the 6V charging program is started.



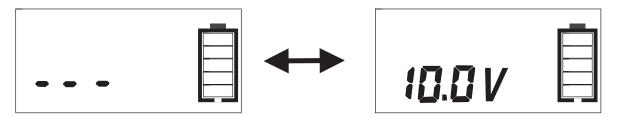
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#### 12V battery

If a battery voltage of between 7.3 V and 10.5 V is measured, this indicates a critical range as at the lower voltage end. It is not clear whether it is a fully charged 6 V battery (which could have a voltage of 7.3 V) or a deep-discharged 12 V battery.

If you attempt to start charging by pressing the MODE key (7), the charger first pauses for 1.5 minutes, after which another control measurement is taken. During this time the following is displayed:



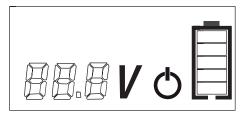
#### Reactivation of deep-discharged 12 V batteries using pulse charging

If after 1.5 minutes, the measured voltage is between 7.5 V and 10.5 V the battery is identified as a 12 V battery and the charging process starts with a gentle pulse charging in the mode to reactivate the battery.

When pulse charging the voltage display  $\textcircled{B} \textcircled{B} \textcircled{B} \swarrow \r{C}$  flashes during the charging process. Once the battery has reached a voltage of 10.5V, the charger switches to trickle charging using the respective charging currents (depending on the selected 12 V charging program) and the voltage display  $\textcircled{B} \textcircled{B} \oiint \r{C}$  shows the voltage without flashing. Depending on the battery connected or the prevailing ambient temperature you can also use the Mode key (7) to change to C or  $\clubsuit$ , even if the battery voltage is below 10.5 V:

The reactivation using pulse charging is the same for all 12 V programs.

If after the 1.5 minute pause the battery is still within the critical range of 7.3 and 7.5 V, the battery is defective and the charger switches to the standby-mode for safety reasons.





#### 3.4 Charging process

Note



Depending on the charging condition of the battery, the charger adapts the charging currents to ensure optimum charging of the battery.

During the main charging phase, the battery is charged with the maximum charging current. Shortly before the maximum charging capacity has been reached the charging current is reduced. This ensures gentle and optimum charging up to the battery's maximum capacity.

#### 6V charging program

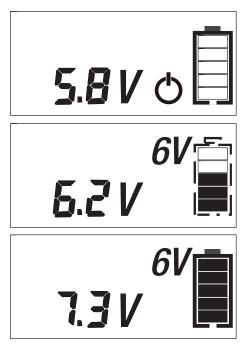
Special program for 6 V batteries of 1.2 to 14 Ah. Adjusted charging current (7.3 V / 0.8 A). When starting the program by pressing the MODE key (7), the program symbol 6V appears on the display.

The voltage display  $\mathbb{A} \oplus \mathbb{A} / \mathbb{A}$  shows the current voltage of the battery.

The battery symbol on the display shows the charging condition of the battery.

The filled bars show the existing capacity, whilst the empty bars show the missing charge. The flashing frame around the battery symbol indicates that the battery is charging.

The battery is fully charged when all bars are filled, and the frame has stopped flashing. The charger then switches to trickle charging to maintain the battery in its fully charged condition.





## Charging program

Particularly suited for 12 V batteries with 1.2 to 14 Ah. Gentle charging due to low charging current (14.4 V/0.8 A).

If the program was selected and started with the MODE key (7), the program symbol **Solution** appears on the display.

The voltage display  $\mathbb{A} \oplus \mathbb{A} / \mathbb{A}$  shows the current voltage of the battery.

The battery symbol on the display shows the charging condition of the battery.

The filled bars show the existing capacity, whilst the empty bars show the missing charge. The flashing frame around the battery symbol indicates that the battery is charging.

The battery is fully charged when all bars are filled, and the frame has stopped flashing. The charger then switches to trickle charging to maintain the battery in its fully charged condition.

### 🖨 Charging program

Designed for standard 12 V vehicle batteries from 14 to 120 Ah. Efficient charging due to higher charging current (14.4 V/3.8 A).

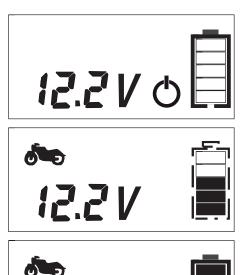
Once the program has been selected and started using the MODE key (7), the program symbol rappears on the display.

The voltage display  $\mathbb{H} \mathbb{H} \mathbb{H} \mathbb{V}$  shows the current voltage of the battery.

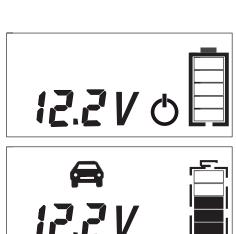
The battery symbol on the display shows the charging condition of the battery.

The filled bars show the existing capacity, whilst the empty bars show the missing charge. The flashing frame around the battery symbol indicates that the battery is charging.

The battery is fully charged when all bars are filled, and the frame has stopped flashing. The charger then switches to trickle charging to maintain the battery in its fully charged condition.



14.4V





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### \* Charging program

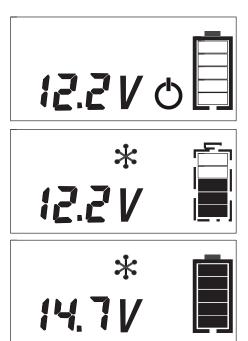
Special charging program for vehicle batteries from 14 to 120 Ah at lower temperatures of below 0°C. Efficient charging due to higher charging voltage and higher charging current (14,7V/3,8A). Once the program has been selected and started using the MODE key (7), the program symbol  $\stackrel{*}{\times}$ appears on the display.

The voltage display  $\mathbb{A} \oplus \mathbb{A} / \mathbb{A}$  shows the current voltage of the battery.

The battery symbol on the display shows the charging condition of the battery.

The filled bars show the existing capacity, whilst the empty bars show the missing charge. The flashing frame around the battery symbol indicates that the battery is charging.

The battery is fully charged when all bars are filled, and the frame has stopped flashing. The charger then switches to trickle charging to maintain the battery in its fully charged condition.



### 3.5 Disconnecting the charger



#### Caution

First pull the plug out of the mains socket and observe the correct sequence when removing the terminal clamps. Avoid the formation of sparks. This is extremely important for your own protection as highly explosive gas can be produced during charging.

Disconnect charger from mains.

Next, remove battery clamp from negative terminal of battery (black clamp) or clamp connected to vehicle chassis.

Then remove battery clamp from positive terminal of battery (red clamp) or clamp connected to the battery.



#### Note

The easiest method is to exactly reverse the steps used for connecting the charger.



### 3.6 Special functions of charger

### Reactivation of deep-discharged 12 V batteries using pulse charging

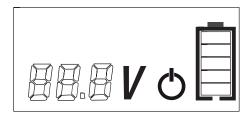
Pulse charging allows gentle pre-charging of 12 V batteries to 10.5 V. The set charging program (  $\clubsuit$ ,  $\rightleftharpoons$  or  $\star$ ) then continues charging until the battery is charged to capacity. (See also chapter "Starting the charging process").

During charging, the charger produces a reduced charging current changing between 0.07 and 0.8 A. This way, the battery is moved into a normal operating condition.

#### Fault protection function

Where a short-circuit, contact interruption or incorrect polarity is detected during charging, the charger automatically terminates the charging program. The charger switches to the standby mode.

Where an incorrect polarity is determined, the red warning light also lights up.



#### **Overheating protection**

If the temperature of the heat sink in the charger reaches 100° C, the charging current is reduced until the temperature has returned to within its normal range.

### Trickle charging

Note

Once the battery has been fully charged, the charger automatically changes to trickle charging. Depending on the measured voltage, the charging is interrupted or the battery is maintained in a fully charged condition with low voltage currents (0.8 / 0.07 A).



A battery can remain permanently connected to the charger without damage or adverse effect on its performance. The trickle charge can be used to maintain a battery.



# **Technical speci** cation

Model:			
	CPL-2054		
Input:	240 V~50 / 60 Hz, 60 W		
Charging current:	0.8 A for 6 V or 12 V /1.2 Ah -14 Ah		
	3.8 A for 12 V/14 Ah to 120 Ah		
Charging voltage:	3,8 V-14,7 V		
For batteries:	6 V: 1,2Ah-14Ah		
	12 V: 1,2Ah-120Ah		
Functions:	Permanent charging function		
	Trickle charging		
	Overheating, short-circuit and polarity reversal protection		
	Reactivation function of deep-discharged batteries		
	(12 V only)		
Charging programs:	6V / 7.3V/0.8A for 6V/1.2Ah-14Ah batteries		
(charging voltage/	/ 14.4 V / 0.8 A for 12 V /1.2 Ah -14 Ah batteries		
max. charg. current)	/ 14.4 V / 3.8 A for 12 V /14 Ah-120 Ah batteries		
	/ 14.7 V / 3.8 A for 12 V /14 Ah-120 Ah batteries		
Cable lengths:	1.8 m mains cable		
	1.95 m battery connection cables		
	incl. insulated terminal clamps		
Dimensions:	190 x 65 x 40 mm		
Protection type:	IP65		
Protection class:			

# **Cleaning and maintenance**



#### Caution

Disconnect from mains prior to carrying out any cleaning work. Never immerse the charger in water as entering water can damage the charger.

When necessary, clean charger with a soft, dry, lint-free cloth.

Only when heavily soiled use a damp, well wrung-out cloth and mild, non-abrasive cleaning agent. After cleaning, thoroughly dry charger.





# Warranty Certificate

#### **Congratulations!**

You have made an excellent choice with the purchase of this quality product. Our commitment to quality also includes our service. Should you, contrary to expectations, and during private use within the warranty period (starting from the date of purchase), experience defects due to manufacturing faults, we shall be liable for warranty in accordance with statutory warranty regulations provided that:

#### Warranty

The product is guaranteed to be free from defects in workmanship and parts for a period of 12 months from date of purchase. Defects that occur within this warranty period, under normal use and care, will be replaced at our discretion, solely at our option with no charge for parts and labour. The benefits conferred by this warranty are in addition to all rights and remedies in respect of the product that the consumer has under the Trade Practices Act and similar state and territory laws.

#### **Proof of Purchase**

This warranty is valid for the original purchase and is not transferable. Please keep your purchase docket or receipt as proof of purchase and as proof of date on which the purchase was made. The purchase docket or receipt must be presented with the warranty when making a claim under this warranty.

#### Service during the Warranty Period

Please ensure the product is properly packaged so as to ensure that no damage occurs to the product during transit. Also make sure that you have included an explanation of the problem.

#### **Extent of Warranty**

This warranty is limited to defects in workmanship or parts. All defective products or parts will be repaired or replaced. This warranty does not extend to accessories. This warranty does not cover manuals and packaging, antennas, line cords, handset cords, filters, bags, seals, cogs, belts or other matters not referred to in the above. This warranty does not cover batteries or any other consumable item.

#### Normal Wear and Tear

This warranty does not cover normal wear and tear to the product or parts.

#### Exclusions

This warranty does not cover:

- Any defect caused by an accident, misuse, abuse, improper installation or operation, lack of reasonable care, unauthorised modification, loss of parts, tampering or attempted repair by a person not authorised by the distributor.
- Any product that has been damaged by a lightning strike either directly or indirectly or a main's power surge or liquid ingress.
- Any product that has not been installed, operated or maintained in accordance with the manufacturer's operating instructions provided with the product.
- Any product that has been used for purposes other than domestic use.
- The product if it is located outside of Australia.
- Any damage caused by improper power input or improper cable connection.



#### After Sales Support

Telephone: 1 800 898 750 Email: aldi.aftersales@axima.com.au



Product Name	CAR BATTERY CHARGER			
Brand Name	Auto XS			
Product Number	5796	Model Number	CPL 2054	
Serial Number				
Name				
Address				
Email		Daytime Tel No		

Date of purchase

We recommend that you attach a photocopy of your receipt, showing the date of purchase, to this Warranty certificate and keep for your reference.

Please ensure that you have the product details (as shown on this card) at hand so that we are able to respond as quickly and efficiently as possible.

Helpline Phone Number 1800 898 750 Helpline Fax Number 02-9765 8555 Helpline Email Address Aldi.aftersales@axima.com.au Helpline Hours 8:30am – 6:00pm AEST



#### After Sales Support Telephone: 1 800 898 750 Email: aldi.aftersales@axima.com.au