- When the battery is fully charged, the LED indicator will light up and the charger will automatically switch to the maintenance charge mode.

BOOST BOOST MODE (MAXIMUM CHARGING VOLTAGE 0.25V ± 16V, 7A).

- This mode is suitable for charging lead-acid batteries containing calcium with capacity over of 14Ah and regeneration of deeply discharged standard lead-acid batteries which have been discharged due to acid stratification.
- Be careful! The high voltage in this mode may result in the loss of battery fluid.
- To select this mode, press down the button MODE until the LED indicator BOOST lights up.
- When the battery is fully charged, the LED indicator will light up and the charger will automatically switch to the maintenance charge mode.
- This mode can also be used for batteries, for which the manufacturer recommends higher charging voltages. Always follow the manufacturer's instructions.

AUTOMATIC REGENERATION

- This mode is designed to regenerate deeply discharged batteries and cannot be separately set up. The charger after connecting to the battery, automatically recognizes the battery is deeply discharged and begin to charge the battery by using lower current. When the battery reaches normal voltage the charger start charging the battery normally. The maximum time of the regeneration mode is 20 minutes. If no adequate battery voltage can be achieved during this time, the charger will stop charging, the battery will be detected as defective and the indicator of damaged battery will light up.

DETECTION OF DAMAGED BATTERY

- The charger is able to recognize if the battery is damaged, a short circuit occurs, positive and negative terminals are reversed. In this case the charger will not begin charging but the LED indicator will light up.

CLEANING CHARGER

- Disconnect the charger from the battery and from the electrical outlet before cleaning. Use a dry and soft cloth to clean the outer surface of charger. Do not use any aggressive chemical cleaners.

CHARGER TECHNICAL SPECIFICATION

- Operating voltage: 220V - 240V ~50Hz/60Hz.
- Output voltage: 14.4V/14.7V/16V (± 0.25V).
- Charge current: 7A maximum.
- Suitable battery types: standard lead-acid batteries, lead acid batteries containing calcium, gel and AGM batteries.
- Recommended battery capacity: 14Ah - 150Ah.
- Battery maintenance capacity: 14Ah - 225Ah.
- Protection: IP65 (housing).

Country of Origin: CHINA
Manufacturer: AVACOM s.r.o.

AVACOM

EN

AUTOMATIC LEAD ACID BATTERY CHARGER
NAPB-A070-012
12V, 7A

APPLICATION INFORMATION

- The charger is designed for charging and maintaining 12V standard lead-acid batteries, gel batteries and AGM batteries with the capacity of 14Ah - 150Ah. You might be exposed to the risk of damage of charger, short circuit, fire or electric shock if you charge other types of batteries than the charger is intended to.

PACKAGE CONTENTS

- battery charger
- operating instructions
- cable with connecting clips
- cable with connecting eyelets
- cable with cigarette lighter plug

SAFETY INSTRUCTIONS

- Before using the charger please read the operating instructions that contain important information for working with the charger safely.
- The warranty cannot be applied if the charger gets damaged due to non-compliance with these instructions.
- The manufacturer is not liable for any consequential damages to property or personal injury caused by improper use or non-compliance with the safety instructions.
- For safety reasons the charger cannot be modified nor its technical specification changed in any way.
- The battery charger can only be used with the supply voltage of 220V - 240V ~50Hz/60Hz.
- Never use the device to charge other types of batteries (NiCd, NiMH, Li-Pol etc.). There is the serious risk of fire or an explosion if you do so.
- If you notice any damage on the product, stop immediately using the charger.
- Maintenance, installation or repair works may only be performed by an expert or a qualified workshop.
- Use only the original spare parts for repair work. The use of any other spare parts may lead to serious damage of charger and personal injury.
- When using the charger pay special attention if children are present. Do not allow children to play with the charger. Store always the charger out of their reach.
- Do not use the charger at an ambient temperature higher than 40°C and relative humidity above 80%.
- Charging lead-acid batteries may lead to the production of explosive gases. Do not try to charge non-rechargeable batteries.
- Do not use the charger in rooms where is the risk of presence of combustible gases, solvents, higher amounts of coal dust and other combustible materials. Make sure the room is properly ventilated during the charging process. Never use the charger in poorly ventilated rooms.
- Keep the charger as well as batteries away from any sources of ignition. Sparking may occur when the rechargeable battery is connected or disconnected. Do not smoke when using the charger.
- Never use the charger immediately after having taken it from cold into the warm room. Condensing moisture can cause damage and there is also the risk of electric shock.
- The charger can be only used by persons who have sufficient knowledge and experience with using similar devices.
- Before charging make sure the voltage of battery you want to charge is really 12V.
- Before connecting the charger to the battery make sure the battery has been disconnected from all devices the battery is powering.
- Always disconnect the ground connection from the rechargeable battery first and only then the positive terminal. Ensure the correct polarity when connecting batteries to the charger (red terminal of the charger = plus/+ black terminal of the charger = minus/-).
- Follow strictly all safety instructions given by battery manufacturer. Never disassemble the battery.
- Lead-acid batteries contain corrosive acids. Avoid contact with eyes or skin. After contact with the skin, thoroughly clean the affected area with soap and water. If acid gets into eyes immediately rinse eyes with cold running water and immediately seek for medical help.

RECYCLING

- After the end of charger service life, the charger must be handed over to a collection point for recycling of electrical and electronic parts. Recycling symbols are written on the product and its packaging. Materials the charger is made of are recyclable according their specifications.

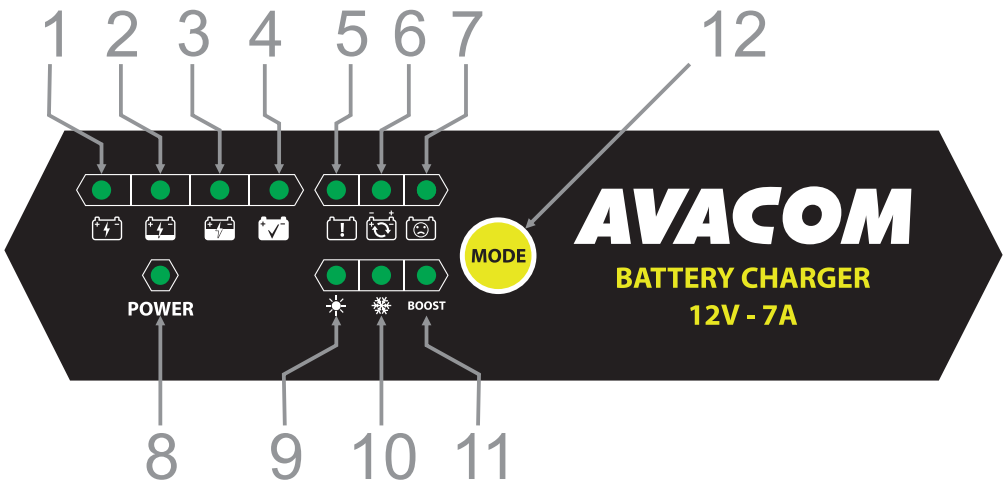
CHARGER FEATURES

- Intelligent charging modes.
- The built-in microprocessor that continuously monitors a battery condition and automatically provides the optimum voltage and the current to the charged battery.
- The memory function that keeps the charger in the mode which was set the last time.
- The regeneration mode for a deeply discharged battery.
- Several charging modes ensure the economical charging according an actual battery status and battery type. When the battery is fully charged the charger will switch to the maintenance charging mode.
- Compact size and light weight.

CHARGERS SAFETY FEATURES

- Electronic protection does not allow damaging the charger in case of short circuit or excessive load.
- The battery protection prevents damaging of charger and battery, if positive and negative poles were connected incorrectly.
- The protection which prevents damage to sensitive electronic components.
- Thermal protection which prevents damage of charger in the case of excessive temperatures during the charging process.
- IP65 protection prevents intrusion of dust and water into the charger.

DESCRIPTION OF LED INDICATORS AND BUTTONS



1		LED charge level indicator. LED indicator lit up - battery capacity is 0% - 25%.
2		LED charge level indicator. LED indicator lit up - battery capacity is 25% - 50 %.
3		LED charge level indicator. LED indicator lit up - battery capacity is 50% and above.
4		LED charge level indicator. LED indicator lit up - battery capacity is fully charged.
5		LED indicator of short circuit. LED indicator lit up - electric circuit is shorted.
6		LED indicator of reversed terminals. LED indicator lit up - terminals are reversed.
7		LED indicator of damaged batteries. LED indicator lit up - battery is damaged.
8	POWER	LED power indicator. LED indicator lit up - charger is plugged in.
9		Summer mode. The maximum voltage 14.4V - 7A. Suitable for charging 12V lead-acid batteries at normal temperatures.
10		Winter mode. The maximum voltage 14.7V - 7A. Suitable for charging 12V lead-acid batteries at low temperatures. Recommended for AGM batteries.
11	BOOST	Turbo mode. The maximum voltage 16V - 7A. Suitable for charging 12V lead-acid batteries containing calcium and charging for deeply discharged batteries, which is caused by acid stratification.
12	MODE	Button for setting charging modes.

CHARGING

- First, make sure the voltage of lead acid batteries you want to charge is 12V.
- Disconnect the battery from its operational load. If the battery is installed in the vehicle, turn the ignition off as well as other devices connected to the battery. Follow the safety instructions of the vehicle manufacturer. Modern vehicles are equipped by sensitive electronic components and controls that can be damaged if you don't strictly follow the instructions of the vehicle manufacturer.
- Plug the charger into the electrical outlet (220V - 240V ~50Hz/60Hz).
- Connect the red clip to the positive (+) terminal of the battery. Connect the black clip to the negative (-) terminal of the battery.
- If the electric circuit is shorted the LED indicator will light up.
- If positive and negative terminals are reversed the LED indicator will light up.
- If the battery is damaged the LED indicator will light up.
- The charger has a memory function. After connecting to the outlet it's in the mode that was set the last time.
- Now you can now select the operating mode by pressing the button MODE, see below.

OPERATING MODES

SUMMER MODE (MAXIMUM CHARGING VOLTAGE 14.4V ± 0.25V, 7A).

- This mode is suitable for lead-acid and gel batteries with a capacity above of 14Ah at normal ambient temperatures environment.
- To select this mode, press down the button MODE until the LED indicator lights up. After the indicator lit up the charger will automatically start charging.
- When the battery is fully charged, the LED indicator will light up and the charger will automatically switch to the maintenance charge mode.

WINTER MODE (MAXIMUM CHARGING VOLTAGE 14.7V ± 0.25V, 7A).

- This mode is suitable for AGM batteries and gel batteries with a capacity above 14Ah at low ambient temperatures.
- To select this mode, press down the button MODE until the LED indicator lights up. After the indicator lit up the charger will automatically start charging.