

INSTRUCTION MANUAL

AdapTask-150 Series

Lead-Acid Battery Charger
with 7 configurable charge profiles



Version / MEC Art-Nr.:

- | | |
|--|---|
| <input type="checkbox"/> 12V / 6A 161-06602-630 | <input type="checkbox"/> 12V / 8A 161-06802-630 |
| <input type="checkbox"/> 12V / 10A 161-06103-630 | <input type="checkbox"/> 24V / 5A 161-12502-630 |

Dear Customer!

Thank you very much for your trust in us and our product. Please read these operating instructions carefully **before** using the device.

MEC-Energietechnik GmbH

1. Safety Rules and General Warnings

- ATTENTION: 100-240 Volts AC voltage, device is not suitable for children – danger of life!!
- ATTENTION: The charger is exclusively designed for rechargeable lead /acid batteries and must not be used for other purposes.
- ATTENTION: Please consider the charging instructions from the battery manufacturer before charging!
- Never place the device on top of the battery while charging!
- EXPLOSION RISK! Avoid sparks or open flames while charging!
- Use the device only in dry rooms and protect against dust, heat (>40°C) and humidity (>80% rel.)
- Protect against direct solar radiation.
- No fluids of any kind must get into the device.
- In case of obvious damage or malfunction immediately disconnect the device from mains supply and protect against unintended reconnection.
- Clean with a dry cloth only.
- DO NOT OPEN! Repair work must only be accomplished by authorized companies or specialized technical staff.
- Disconnect from mains before connecting or disconnecting the battery.
- Do not recharge non-rechargeable batteries.

2. General Information

This special 3-step charger does, other than those with regular 3-step technology, not remain locked into a rigidly timed absorption phase, this often being one of the main reasons for the premature death of good batteries. The AdapTask charger adapts to the battery's state of charge, precisely knowing at which point in time to change from absorption- to maintenance charge.

In addition to all new batteries, Adaptive charging is very well suited for:

→ AGING BATTERIES which, if charged with conventional battery chargers, may respond badly to the "Battery Full" criterion – rendering them bloated by overcharging.

→ BATTERIES ACROSS A WIDE RANGE OF SIZES, by using one and the same AdapTask charger – with no danger of over- or undercharging.

3. Special Features

- Microprocessor controlled HF-charger
- 7 user selectable charge profiles
- Adaptive charge profiles
- Automatic trickle charge
- 4 LED for operating and charging status indication
- Wide range input (100Vac...240Vac / 50...60Hz)
- Convection cooled or load dependent fan*
- Short circuit and reverse polarity protection
- Spark suppression
- Internal overheat protection

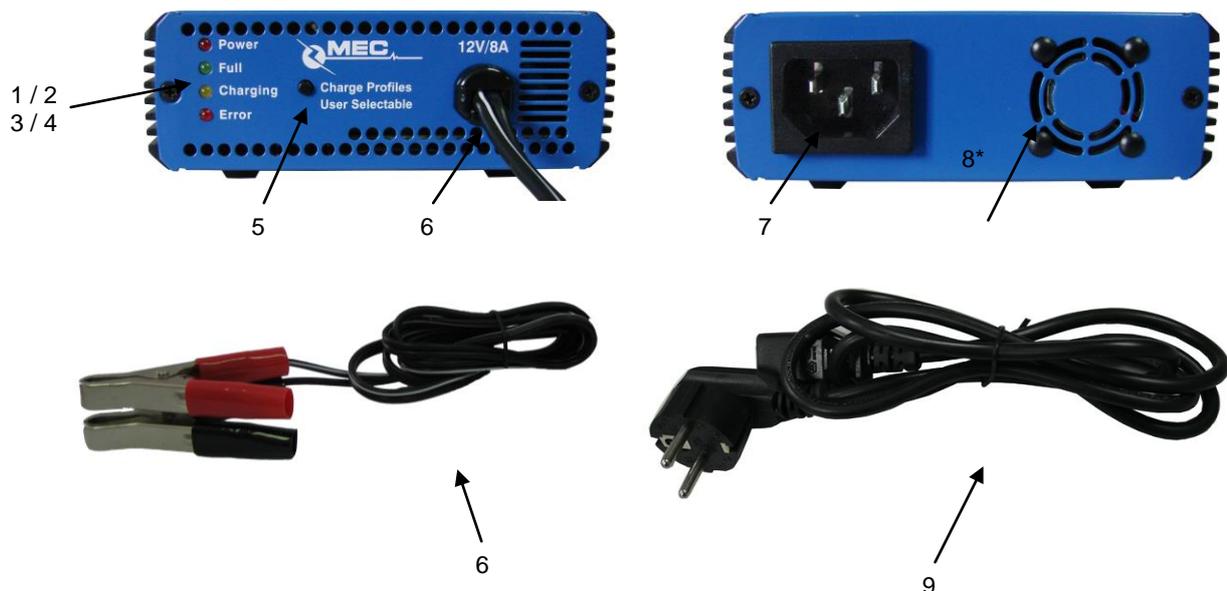
* Model dependent

4. Scope of delivery

- 1 Red Power-LED
- 2 Green Full-LED
- 3 Yellow Charging-LED

- 4 Error-LED
- 5 Mode button
- 6 Charging cable (DC)

- 7 IEC 60320 Inlet
- 8 Fan slots (model dependent)
- 9 Power cable (AC)



5. How to select the charge modes

Make sure that the charger is disconnected from the mains supply and from the battery. Press and hold the mode button(5) in the front panel, then connect the charger with the mains supply (AC). Following the yellow-, green- and red-LED (Error) will blinking for about 4 seconds and then change to light continuously - at this moment, release the mode button. After that, the yellow- and two red LED are on continuously, it indicates that the mode-selection can be started. Press the mode button briefly, following the yellow-, green- and red LED will light on simultaneously, and the blinking times of LED indicates the selected mode, i.e. blinking 3 times means mode 3 is selected. Pressing the mode button again, it will change to mode 4.

After selecting the mode you need, press and hold the mode button for more than 2 second, all the three LED will be light off and it indicates the selected-mode is fixed and turns to be ready for charging.

6. Operation

I. Connect the charger to the battery:

First make sure that the charger is disconnected from the mains supply.

Variant a - battery is built in the vehicle:

The battery terminal which is not connected to the chassis has to be connected first (Red +). The other connection is to be made to the chassis (Black -), at a safe distance (>30cm) from the battery and fuel line.

Variant b - battery is not built in the vehicle:

First connect the positive terminal (+) of the battery with the red clamp of the charging cable (+).

After that, connect the negative terminal (-) of the battery with the clamp of the black charging cable (-).

Connect the charger to the mains supply; make sure that the charger is only plugged into an earthed socket outlet.

II. Start charging:

The charging process starts automatically and runs through the following three charging phases:

1. charging phase: bulk phase (CC)

This charging step is indicated by **constant lighting of the yellow Charging LED (3)**.

During the constant current phase, the battery is being charged to ~80% of its capacity.

2. charging phase: absorption phase (CV)

This charging step is indicated by **blinking of the yellow Charging LED (3)**.

During the constant voltage phase the battery is being charged to its maximum capacity.

3. charging phase: trickle charge (CV)

This charging step is indicated by **constant lighting of the green Full LED (2)**.

As soon as the battery has reached its full capacity, the charger switches into trickle charge. The charger can now be disconnected from the battery or remain at the battery in trickle charge mode. This guarantees a full battery at any time and therefore an immediate readiness for use.

III. Disconnect the charger from the battery:

After charging, disconnect the battery charger from the supply mains. Then remove the chassis connection (Black -) and following the battery connection (Red +).

7. Errors and Troubleshooting

Red Power-LED does not light:

- Check if the mains plug is correctly plugged in
- Check if mains cable is defective

Constant lightning of red Error-LED:

- Check the polarity of the battery
- Check the voltage of the battery
- Check if a defect or deep discharged battery is connected

8. Technical Specifications

AdapTask-150 Series				
Version →	12V / 6A	12V / 8A	12V / 10A	24V / 5A
Input (Vac)	100...240V / 50...60Hz			
Charging voltage nom. (Vdc)	12	12	12	24
Charging current max. (A)	6	8	10	5
Output power max. (W)	93	124	155	155
Temperature range	0°C – 40°C			
Certifications	CE			
Cooling	convection	Load-dependant fan		
Enclosure	Metal housing, painted, IP20			
Dimensions / Weight	180 x 110 x 36mm / ca. 800g			
MEC Art-No.:	161-06602-630	161-06802-630	161-06103-630	161-12502-630

Profile Settings	Output-voltage (VDC)			
	Absorption phase		Trickle charge	
	Version		Version	
	12V	24V	12V	24V
M1 AGM- & Wet Batteries - and recommended for most battery types	14.7V	29.4V	13.6V	27.2V
M2 Gel Batteries - charging at reduced charge voltage	14.2V	28.4V	13.8V	27.6V
M3 Calcium Batteries - charging at higher charge voltage	15.5V	31.0V		
M4 Power supply - for float- or standby charging	13.8V	27.6V		
M5 Frequent mains failure - charging at reduced absorption time	14.5V	29.0V		
M6 Battery capacity exceeds nominal charger rating - charging at increased absorption time				
M7 Heavy, intermittent loading - lost charge is instantly replenished. Loads directly connected to the battery (mobile homes or trailers, supplied by fixed mains at camping facilities) will only see a stable voltage, not being in excess of 13.8V/27.6V. Heavy, intermittent demand on the battery power does not trigger the charger into a renewed charge cycle. The battery will buffer any surge of power demand, compensating for the excessive power drain the charger is unable to deliver temporarily, being limited by it's nominal rating.				

Attention: Deviating data and specifications from battery manufacturers take priority!

9. Advice for Disposal



It is prohibited to dispose the charger into the house- and residual waste removal (WEEE-directive 2002/96/EC and EAG-VO and ElektroG), it must be disposed at the according collection points. For the protection of our environment please inform yourself at your communal administrative agency about your nearest disposal point.



The charger equates to the RoHS-directive 2002/95/EG, for the restriction of the use of certain hazardous substances in electrical and electronic equipment.



10. Disclaimer of Warranty

- The warranty period (see our GTC) starts with device being dispatched by the manufacturer. The MEC-Energietechnik GmbH is accepting liability by guaranteeing to working hours and spare parts only.
- For damages caused by non-observance of the operating instructions, inappropriate start up or handling as well as reconstructions and modifications of the device, the warranty claim expires and MEC-Energietechnik GmbH assumes no liability for consequential damage to property or persons!

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