

# BATTERY CHARGERS



**AQ-TRON®**  
SMART CHARGERS

## SMART CHARGING

These AQ-TRON chargers maximize the life of your battery through a series of 4 to 10 steps in a unique charging process, the chargers constantly monitor the condition of the battery. When required, they take appropriate action: desulphating, reviving, charging, conditioning and maintaining. AQ-TRON chargers regulate the charge voltage to protect sensitive and expensive electronics.

Some AQ-TRON chargers recondition and help revive deeply discharged batteries. Others even have a backup power supply mode, so you can change your vehicle's battery without losing any program settings. Once the charger is connected, you can forget about how long the battery needs to be charged or whether it is sulphated. Our chargers take care of all this automatically. We call it "connect and forget".



LAD/AQ1000



LAD/AQ2000



LAD/AQ3500



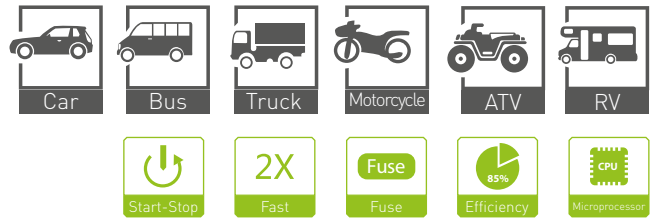
LAD/AQ7000



LAD/AQ15000

Ref.	Voltage input	Watt	Voltage Output	Ampere	Type	Ah	Dimensions (mm)	Weight
LAD/AQ1000	220-240	20	6/12V	1A	All Types 6/12V lead acid batteries	Max. 30Ah	130x60x34	0,25kg
LAD/AQ2000	220-240	40	6/12V	2A	All Types 6/12V lead acid & 12V lithium batteries	Max. 60Ah	235x82x122	0,4kg
LAD/AQ3500	220-240	70	6/12V	3.5A	All Types 6/12V lead acid & 12V lithium batteries	Max. 120Ah	265x92x122	0,52kg
LAD/AQ7000	220-240	120	12/24V	7/3.5A	All types 12V/24V lead-acid & 12V Lithium batteries	14-230Ah (12V) 14-115Ah (24V)	310x118x142	0,85kg
LAD/AQ15000	220-240	350	12/24V	15/7.5A	All types 12V/24V lead-acid & 12V Lithium batteries	50-400Ah (12V) 25-200Ah (24V)	437x125x207	1,5kg

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**1 STEP 1 DESULPHATION**  
Pulsing voltage removes sulphates from the lead plates in the battery and restores battery capacity.

**2 STEP 2 SOFT START**  
Tests if the battery can take charge. Charging begins if the battery is OK.

**3 STEP 3 BULK**  
Charges at maximum current, to approx. 80% of the battery capacity.

**4 STEP 4 ABSORPTION, Ready for use**  
Charges at declining current until the battery has reached 100% of battery capacity.

**5 STEP 5 ANALYZE**  
Tests if the battery can hold charge. Batteries that cannot hold charge may need replacement.

**6 STEP 6 RECOND**  
Reconditioning function for deeply discharged batteries.

**7 STEP 7 FLOAT (maintenance)**  
Fully charged  
Maintains the battery voltage at maximum level by providing a constant voltage charge.

**8 STEP 8 PULSE, Maintenance charging**  
Maintains the battery at 95-100% capacity. The charger monitors the battery voltage and gives a pulse when necessary, to keep the battery fully charged.



**Optimization**  
Stabilizes internal battery chemistry for increased performance and longevity.



**Load Tracking**  
Dynamically changes charge current when a load is placed on the battery.



**Diagnostics**  
Intuitive visual diagnostic tool for detecting reverse polarity, low-voltage or damaged batteries.



**Energy-Save**  
Minimizes energy consumption when full power is not needed.



**Safe**  
Protects against reverse polarity, sparks, overcharging, overcurrent, open-circuits, shortcircuits and overheating.



**Memory**  
Returns to last selected mode when restarted.



**Interactive**  
Alters the charging process based on organic battery feedback.



**Recovery**  
Applies a high-voltage pulse charge when low voltage, sulfation, or lost capacity is detected.



**Rugged**  
Dirt, water, UV, impact, and crush resistant.



**Maintenance Plus**  
Keeps the battery fully charged without overcharging, indefinitely.