

# OptiMATE6

**ampmatic**

**New technology for  
12V automotive and  
marine battery care**



**Desulphates and saves neglected batteries**

**Optimises battery power and life**

**Early warning of battery problems**

**TEST at start and TEST every hour**

**NEW**

**ampmatic™ current control: 0,4 – 5,0 Amps**

The new **OptiMATE6 ampmatic™** is the world's most advanced and versatile battery charger, maintainer and tester. All in one unit, in a stylish, robust, weatherproof enclosure, easily wall-mountable.

The **ampmatic™** microprocessor automatically diagnoses your battery's condition and sets the optimal charge current and program. An enhanced version of the acclaimed **OptiMATE™** multi-stage desulphation program will even automatically give many deep-discharged and otherwise "dead" batteries a new lease of life. When the charge is complete, the eco power-saving mode ensures ultra low power consumption while maintaining your battery, optimally charged, always cool and safe, month after month, prolonging its life by up to 400% !



# OptiMATE

**Battery Performance  
Guaranteed !**

## How it works

- 1. Initialisation:** OptiMate 6 will only activate if the battery voltage measures at least 0,5V. **NEW**
- 2. Programming:** the **ampmatic™** processor checks the battery's condition to determine the appropriate charge program.
- 3. Desulphation and recovery:** if necessary, 2 or 3 stages of high voltage and oscillatory pulsing are applied to recover neglected, flat batteries (removed from the vehicle \* ) from sulphation to a chargeable state.  
\* The voltage is limited to 16V if the microprocessor detects the battery may be connected to vehicle circuitry.
- 4. Bulk charge:** the **ampmatic™** processor actively adjusts charge current to match battery characteristics, achieving a complete charge in the shortest time.
- 5. Short-circuited / dead cell check:** Charge acceptance is continuously monitored to detect internal damage and prevent unnecessary charging of a battery that cannot be recovered.
- 6. Absorption and equalisation:** for 10 minutes the current is delivered in pulses with voltage controlled between 13,7 and 14,3V, aiding cell voltage equalisation and improving the battery's overall power delivery.
- 7. Charge verification:** the voltage is limited at 13,6V while the **ampmatic™** processor monitors the current absorbed by the battery. If this reveals a less than optimal charge, the program reverts to absorption for a further 10 minutes.
- 8. Voltage retention test:** is conducted for 30 minutes during which no charge current is delivered, with 5 possible test results indicating the battery's general state of health. A green (voltage > 12,7V) result extends the test up to 12 hours, to check for excessive self discharge (even a partly damaged battery may initially retain sufficient power, but lose power faster than normal there-after) or higher than expected power loss through the vehicle's electrical system.
- 9. Charge maintenance:** The MAINTENANCE CHARGE CYCLE consists of 30 minute float charge periods at a voltage of 13,6V followed by and alternating with a 30 minute 'rest' (no charge current) periods.  
**The voltage retention test and maintenance charge cycle will repeat 24 hours after the start of the very first test and continue to repeat for as long as the charger remains connected.**  
The alternating charge and 'rest' maintenance program provides the recommend maintenance voltage for AGM / GEL batteries whilst reducing the average voltage as required by STD filler cap batteries, making it ideal for indefinite and 100% safe long term maintenance charging of any type of 12V lead-acid battery.

## Technical Specifications

Recommended for AGM/MF, STD, GEL and spiral cell batteries	up to 240Ah
Programme control	<b>ampmatic™</b> microprocessor
Input current max.	0,55A @ 230V
Typical annual energy cost	< €1 (continuous maintenance)
Reverse drain current	less than 0,001A
Output current (bulk charge)	0,4A – 5,0A
Automatic desulphation	multistage (high voltage, turbo and pulsed mode)
Charge time limit	48 hours (maintenance time: unlimited)
Maintain / test cycles	30 min/30 min (alternating hourly)
Charge retention test	Range: 12,2 - 12,7V. GOOD (green) = battery voltage > 12,7V
Size	199 x 71 x 61mm
Weight	740g
Enclosure classification	IP54
Mounting	easy direct wall mounting
Input cable length	2m
Output cable length	2m
Included Accessories	O-1 fused eyelet set, weather protected O-4 clamps set for bench charging
Operation temperature range	-40°C / +50°C
Warranty	3 years

