

OptiMATE PRO-2 **(ampmatic)**

**Professional 12V
battery management
for 2 automotive,
marine or deep
cycle batteries**



10A charge current / bank

Saves batteries as low as 0.5V

14,4V and 14,7V charge programs

Effective pulse cell balancing mode

Charge series connected batteries

The new **OptiMATE PRO-2 x 10A** handles up to 2 batteries at a time. Our exclusive **ampmatic** microprocessor with version 2 programming, tests the battery before, during and after charging and charge current is automatically varied according to battery size and health. Choose the **FAST (3hr)** program to quickly recharge a battery on the vehicle or choose the **14,4V** or **14,7V** program to save, recharge and test batteries (min size: 24Ah) according to manufacturer specifications.

OptiMATE™

**Battery Performance
Guaranteed!**

OptiMATE PRO-2

ampmatic

How it works

Before connecting, select "FAST" / 14,4V or 14,7V programs according to battery requirements.

1. Initialization: **OptiMate PRO-2** displays battery condition for 10 seconds.
2. Programming: the **ampmatic** processor decides the appropriate program entry point according to battery condition.
3. **SAVE: Desulphation and deep discharge recovery:** if 14,4V or 14,7V programs are selected **SAVE** mode employs high voltage and / or oscillatory pulsing to recover neglected, flat batteries to a chargeable state.
NOTE: SAVE mode is disabled when FAST is selected.
4. **CHARGE Bulk:** the **ampmatic** processor sets and then continually re-adjusts the constant current optimally for each individual battery according to its evolving electrical characteristics. Charge voltage is very accurate! The battery cables have integrated sense wires to measure voltage directly at the battery terminals.
5. **Short-circuited cell check:** during charging the **ampmatic** processor checks for short-circuited or damaged cells.
6. **Absorption and cell balancing:** current is delivered in pulses to cause the voltage to oscillate between 13,7 and 14,4V (14,7V), completing charge and balancing cell voltage for improved battery performance.
7. **Charge verification:** the **ampmatic** processor monitors the current absorbed by the battery. If this reveals a less than optimal charge, the program reverts to absorption for further charging.
8. **TEST:** when the optimal charge has been achieved, battery state of health and state of charge test commences. During the first 30 minutes test (FAST selection, 10 minutes only) the battery state of health is verified (can it hold charge or not?). Then the test is extended up to 12 hours to determine state of charge (how much charge can it hold?). Results are displayed on the easy-to-read LED panel.
9. **Charge maintenance:** For 30 minutes in every hour charge is delivered at a float limit of 13,6V. The battery accepts only the current required to keep it at 100% charge. During the alternate 30 minutes the battery is allowed to settle (no charge delivered). **OptiMate PRO-2** can be left connected to the battery indefinitely, the battery will stay cool and safe and optimally charged.

Positioning / Mounting Table top away from batteries / optional wall bracket available

Technical Specifications

Recommended for AGM/MF, STD, GEL and spiral cell batteries	from 24Ah to 240Ah (24 hour bulk charge limit)
Programme control	ampmatic™ microprocessor
Input current max.	5A @ 120V 60Hz / 2,5A @ 230V 50Hz
Reverse drain current	less than 1mA per output
Output current (bulk charge)	2 x 10A
Automatic desulphation	multi-stage (high voltage, turbo and pulsed mode)
Charge time limit	24 hours for 14,4V & 14,7V programs(maintenance time: unlimited)
Maintain / rest cycles	30 min/30 min (alternating hourly).
Charge retention test	5 possible results from 'good' to 'bad'
Size	235 x 274 x 178 mm / 9 1/4 x 10 3/4 x 7 inches
Weight	8kg / 18 pounds
Positioning / Mounting	Table top away from batteries / optional wall bracket available
Input cable length	2m / 6ft 5"
Output cable length	1,4m / 4,6ft (fixed cable)
Cooling	Forced: Dual fans, will switch on if charge current exceeds 4A.
Operating ambient temperature range	0°C / 32°F to +40°C / 104°F
Warranty	2 years



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