OptiMATE DC→DC

12V → 12V 2A

NEW

Unique battery to battery charger!

Charge without AC power

Maintain Remote Battery

Save your 'dead' battery

from another 12V battery or DC supply!

OptiMate DC to DC, recovers, charges & maintains a 12V lead-acid battery from another 12V battery or DC supply. | OptiMate DC to DC brings you the advanced OptiMate features, also at places where there is no access to an AC Power supply. Recover, charge and maintain your battery using a larger source battery (ideal 1.5x capacity) or DC Supply without fear of discharging the source thanks to OptiMate's Source Battery Protection. | OptiMate DC to DC, Battery Performance Guaranteed. **OptiMate DC to DC.** Battery performance guaranteed!

1	2	3	4	5	6	7
Low Volt Start (1V)	Turbo SAVE	Pulse SAVE	Controlled CHARGE	OPTIMIZE	TEST after CHARGE	OptiMate maintenance

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How it works

1. **Safety check:** Optimate DC->DC must be connected to a battery (retaining minimum 1V) to activate its output.

2. **Desulfation and recovery:** if due to sulphation the battery's resistance is abnormally high, a voltage up to 20V is automatically applied to overcome this so as to recover very flat or neglected batteries until they are able to accept the normal charge program.

3. **Bulk Charge:** A constant current of 2 A (max) efficiently brings the battery close to full charge.

4. **Charge verification:** The circuit verifies battery charge level (2 hours maximum). If the battery requires further charging, BULK CHARGE recommences for brief periods. These revisions may occur as many times as is necessary to reduce the battery's current demand below 200mA at 13,6.

5. **Charge retention test:** Delivery of current ot the battery is interrupted for 30 minutes, determing the battery's ability to retain charge. For batteries with a GOOD state of health, LED #5 (green) should continue to flash for the full 30 minute period.

6. **Charge maintenance:** LED #5 or 6 indicates depending on the outcome of the voltage retention test.The maintenance charge mode is designed to preserve the DC source battery whilst maintaininging the battery connected for maintenance at full charge. A charge period intermittently alternates with a monitor period. Length of charge and/or monitor period depends on the drain of connected circuitry from the MAINTAINED battery. A charge period is activated when voltage of a the maintained battery reduces below 12.9V and continues until the voltage reaches 13.6V. LED #5 or 6 indicates continuously during the charge period. During a monitoring period no charge is delivered. Current draw from the SOURCE battery is limited to what the charger reuqires to monitor the MAINTAINED battery. During battery monitoring mode LED #5 or 6 will flash every 10 seconds to indicate battery status (as determined during the previous voltage retention test). The charge and monitor cycles will repeat until either the SOURCE battery (or DC supply) or MAINTAINED battery is disconnected or the SOURCE battery is completely discharged.

7. **Source battery protection:** warning light and automatic shut-down. Once the source battery voltage reduces below 10V, the Optimate DCtoDC will shut off avoiding deep discharge of the source battery.

Technical Specifications

Ideal for 12V lead-acid batteries	6Ah to 96Ah, AGM/MF, Standard, GEL and AGM spiral cell
Program control	7 stages, fully automatic
Output current (bulk charge)	2A
Automatic desulphation	Yes
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	167 x 65 x 46 mm / 6 1/2 x 2 1/2 x 1 3/4 inches
Weight (packaging)	0.6 kg / 1 1/3 lb
Enclosure	fully sealed (IP54), 4 x wall mount tabs
Input cable length	2m / 6ft
Output cable length	2m / 6ft
Included Accessories	O-01 fused eyelet set, weather protected O-04 clamps set for bench charging O-14 fused clamps set for source battery connection
Operation temperature range	From –20ºC <-> 40°C / –4°F <-> 104°F
Warranty	3 years
Ratings / approvals : Safety, EMC, Energy efficiency, enclosure seal rating	IP54, CE, NRTL (UL & CSA), SAA (AU & NZ), approved by TUV Sud. BC (California Energy Compliant).

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