



# Deltran BATTERY TENDER® 4-BANK INTERNATIONAL

## QUAD Output 12 Volt Battery Management System

Detachable  
AC Power Cord  
connects to  
computer  
style module  
in back of unit.



Ships with both ring terminal  
& alligator clip  
harnesses,  
fused with  
Quick  
Disconnect

Integral  
DC output  
cords have mating  
Quick Disconnect

### The best way to eliminate sulfation is to prevent it!

The Battery Tender® 4-BANK International will fully charge a battery and maintain it at the proper storage voltage without the damaging effects caused by trickle chargers (especially sulfation).

- ◆ BTP MICROPROCESSOR TECHNOLOGY
- ◆ 4-STEP CHARGING (Initialization, Bulk, Absorption, Float)
- ◆ SPARK PROOF
- ◆ SHORT CIRCUIT & REVERSE POLARITY PROTECTED
- ◆ TEMPERATURE COMPENSATION
- ◆ 2 YEAR WARRANTY (Material & Workmanship Only)

### ORDERING INFORMATION

Deltran PART NO.	DESCRIPTION
022-0148-DL-WH	12 Volt 1.25 Amp Output / Western Hemisphere
Ask customer service about International configurations.	
081-0148-25	Optional 25 ft. 2-pin Output Extension Leads
081-0148-12	Optional 12.5 ft. 2-pin Output Extension Leads

### TECHNICAL SPECIFICATIONS SUMMARY

Input Voltage & Frequency	100 to 240 VAC, 50/60 Hz
DC OUTPUT (Nominal voltage & current values)	
Output Current	<b>1.25 Amps (Each Channel)</b>
Output Voltage	<b>12 Volts</b>
Charger Output Voltage Amplitudes throughout the entire charge algorithm, including absorption and float maintenance, are consistent with the optimum charging recommendations of the major lead-acid battery manufacturers.	
Maximum Operating Temperature	50 °C (122 °F) Typical
Charger Case Dimensions	8.8 (224) L x 7.0 (178) W x 3.5 (89) H in (mm)
Shipping Weight with Cable Accessories	5.0 lbs (2.3 kg)

Note: Except for the wider range on the AC input voltage and frequency, this unit is operates very much like the traditional Battery Tender Plus. It should safely charge all lead acid batteries. Always check with the battery manufacturer to get the most complete charging recommendations that are consistent with your application.

**Declaration of Conformity:** These battery charger products are UL Listed in file E206016 and they carry the CE mark. They comply with UL-1236 and the standards comprising the following groups: EC Low Voltage Directive and EC Council Directive on Electromagnetic Compatibility.

**Design Conformance & Revision:** All Deltran charger products are 100% inspected and electrically tested prior to shipment. **All Deltran battery charger designs are proprietary and subject to change without notice.** Deltran makes no specific claims nor does it either make or imply any specific guarantee or warranty with respect to either the physical configuration or performance of any of the battery charger products listed herein, including suitability for purpose or merchantability.

*For inquiries and orders, contact:*

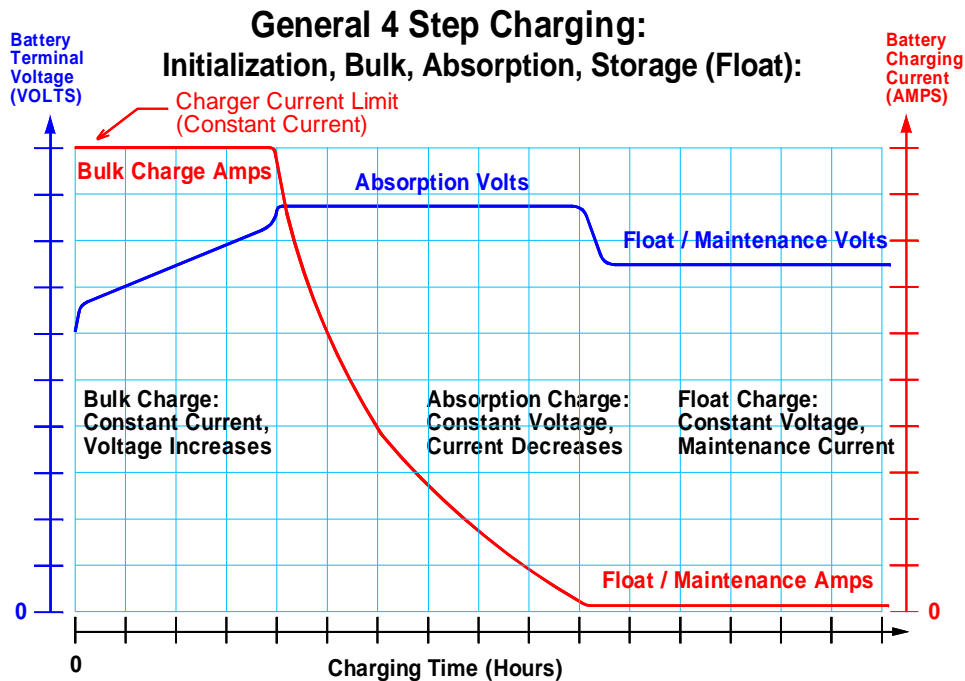
**MICROBATTERY.COM**

7350 NW 35th Terrace, Miami, Florida 33122

Customer Service: 1-866-999-2355

Phone: 1-305-371-9200 Fax: 1-305-371-9400

www.microbattery.com



## INDICATOR LIGHT OPERATION

- **YELLOW FLASHING** - When the yellow light is flashing, the AC power is applied to the charger and the microprocessor circuitry is functioning properly. There is no battery connected or there is a problem with the connections between the charger and the battery.
- **YELLOW** - When the yellow light is on, the battery charger is in the process of fully charging the battery. In order to properly charge large capacity batteries, the charger may remain in this mode for several hours or even days.
- **GREEN FLASHING** - When the green light is flashing, and the yellow light is on, the battery is greater than 80% charged and may be removed from the charger and used if necessary. Leave the battery on charge until the green light is solid whenever possible. Once the green light begins to flash, it will remain flashing until the battery charger output current drops below the optimum recharge threshold, or until the absorption timer expires.
- **GREEN** - When the green light is lit, the battery charger is in the storage mode of charge. In this mode the charger will maintain the battery at full charge.

- Step 1) Initialization:** Yellow Light On or Yellow Light Flashing: Monitor Circuit verifies appropriate battery voltage levels and good electrical continuity between the battery and the charger DC output.
- Step 2) Bulk Charge:** Yellow Light On, Green Light Off: Constant Current at Full Power. Bulk Charge ends at approximately 75% to 80% of full battery recharge.
- Step 3) Absorption Charge:** Yellow Light On, Green Light Flashing: Constant Voltage at Absorption Level. This conditions the battery for optimum performance. Absorption charge ends when the battery charging current drops below the optimum recharge threshold or the absorption timer expires.
- Step 4) Float Charge:** Yellow Light Off, Green Light On. Constant Voltage at Float / Maintenance level. Keeps battery fully charged and maintains high specific gravity. Full charge reset monitor protects battery against excessive appliance current draw while charging. Float charge continues indefinitely.

## APPLICATION INFORMATION

- ◆ Always operate the charger in a well ventilated area
- ◆ If neither indicator light comes on after you plug in the AC cord, then check the AC power receptacle.
- ◆ If the green indicator light comes on too soon, check the battery and the output connections from the charger.
- ◆ It may take a long time for the green light to come on when charging a large battery.