

## Single Voltage Output Battery Chargers



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

The Battery Tender<sup>®</sup> Junior will fully charge a battery and maintain it at the proper storage voltage without the damaging effects caused by most trickle chargers (especially sulfation). This trickle charger has a brain!

- SUPERSMART<sup>TM</sup> Charging Technology
- **4-STEP CHARGING (Initialization, Bulk, Absorption, Float)**
- SPARK PROOF
- SHORT CIRCUIT PROTECTED
- REVERSE POLARITY PROTECTED
- **5** YEAR WARRANTY !! (Material & Workmanship Only)

ORDERING INFORMATION			
Deltran PART NO.	DESCRIPTION		
021-0123	12 Volt 0.750 Amp Output		
021-0127	6 Volt 0.750 Amp Output		
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		120 VAC, 60 Hz		
DC OUTPUT (Nominal voltage & current values)				
Output Current		0.750 Amps		
Output Voltage		12 Volts or 6 Volts		
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 Typical	
Charger Case Dimensions	3.3 in (85 mm) L x 2.3 in (59 mm) W x 1.9 in (48 mm) H			
Shipping Weight with Cable Accessories			2.0 lbs (0.9 kg)	

Note: The economical Battery Tender Junior is designed to accommodate the demanding charging requirements of high quality lead-acid batteries and should safely charge all lead acid battery types. Always check with the battery manufacturer to get the most complete charging recommendations that are consistent with your application.

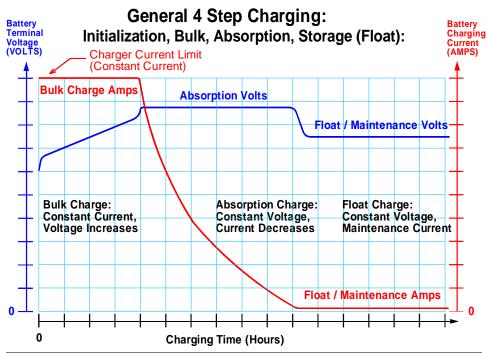
**Declaration of Conformity:** These battery charger products are UL Listed in File E206016. They comply with the following electrical safety standards: UL-1236 & CSA 22.2

**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**

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**Step 1) Initialization:** Red Light On or Red 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:** Red 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:** Red 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:** Red 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.

# INDICATOR LIGHT OPERATION

**RED FLASHING** - When the red 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.

➢ RED - When the red 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 red 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.

RED & GREEN ALTERNATING - This will indicate either a reverse polarity connection where the charger output cables connect to the battery, a sulfated battery, a corroded battery terminal, or other high resistance output connection..

## **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.