



Battery Tender® **International Waterproof Junior** **“Waterproof 800”** **12 Volt 800 mAmp**



GENERAL DESCRIPTION: The Battery Tender® International Waterproof Junior battery charger is a small, 12-volt, free standing, fully epoxy encapsulated, switch mode power converter. It has a true DC output at a maximum of approximately 12 watts and a maximum output charging current of 0.800 amps.

OUTPUT CABLE CONNECTIONS: The battery charger DC output cable has 2-pin, molded, quick disconnect plug that is fully compatible with not only the standard ring terminal and alligator clip cable accessories that ship with the unit, but also with the optional cigarette adapter plug.

STATUS INDICATOR LIGHT: The Waterproof 800 charger has a single status indicator light that changes color from yellow to green.

- **YELLOW** - When the yellow light is on, the battery charger is correctly connected to the battery and it is providing full charge power to the battery. To fully charge a large battery, the yellow light may be on for several hours or even days.
- **GREEN** - When the green light is on the battery is fully charged and the charger is in the storage / float / maintenance mode. In this mode, the charger will maintain the battery at full charge.

12V 0.8A International Waterproof Junior Technical Specification Sheet

INTERNATIONAL WATERPROOF JUNIOR	
Charger Specification Summary	
SOFTWARE:	STANDARD
Deltran Part Number:	022-0150
Nominal DC Output: (Current Rating at the appropriate output voltage level for UL-1236 compliance)	
Voltage:	12 Volts
Current:	0.8 Amps
AC Input Voltage Range:	Universal Input 100 to 240 VAC
AC Input Frequency Range:	50/60 Hz
Maximum Input Current: (At the low AC line voltage)	0.275 Arms @ 100VAC
Nominal Efficiency:	85%
Nominal Power Factor:	0.6
Charger Output:	
Maximum Power: (+/- 3%) @ 25 °C	12 Watts (11 W typical)
Maximum Current: During Bulk Charge	0.8 Amps
Absorption Charge Peak Voltage:	14.5 VDC = (2.428 vpc)
Float Voltage:	13.2 VDC = (2.20 vpc) Remains at Float as long as AC power available to unit, or until battery voltage drops below charge reset value.
Charge Reset: Battery Voltage Threshold	12.1 to 12.3 VDC = (2.017 to 2.050 vpc)
Output Regulation:	
Line (Typical):	1 %
Electrical Isolation:	
Input / Output:	2500 VAC
Input / Chassis:	2500 VAC
Output / Chassis:	500 VAC
Operating Temp:	-20°C to 50°C (-4°F to 122°F)
Weight: (Including Clips & Rings)	Approximately 1 lb. (0.455 kg)
Charger Case Dimensions: (Length, Width, Height)	4.25 in (108 mm)L x 2.75 in (70 mm)W x 1.5 in (38 mm)H
Shipping Weight:	Approximately 2.0 lb. (0.91 kg)
Enclosure:	Molded Polycarbonate
Special Features:	
Short Circuit Protection:	YES
Reverse Polarity Protection:	YES
Spark Proof:	YES
Temperature Compensation:	NO
Water Resistance:	WATERPROOF
Safety Compliance Listings: UL (File E206016), CSA, CE Mark	
Declaration of Conformity: These battery charger products are designed to meet or exceed the specific requirements of: UL-1236 and CSA 22.2, Low Voltage Directive 73/23/EEC: EN 60335 Standard for Safety of Household and Similar Electrical Appliances, Electromagnetic Compatibility Directive 89/336/EEC EN50082-1:1992: EMC Generic Immunity Standard.	
Design Conformance & Revision: All Deltran charger products are 100% inspected, electrically tested, and burned in 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.	

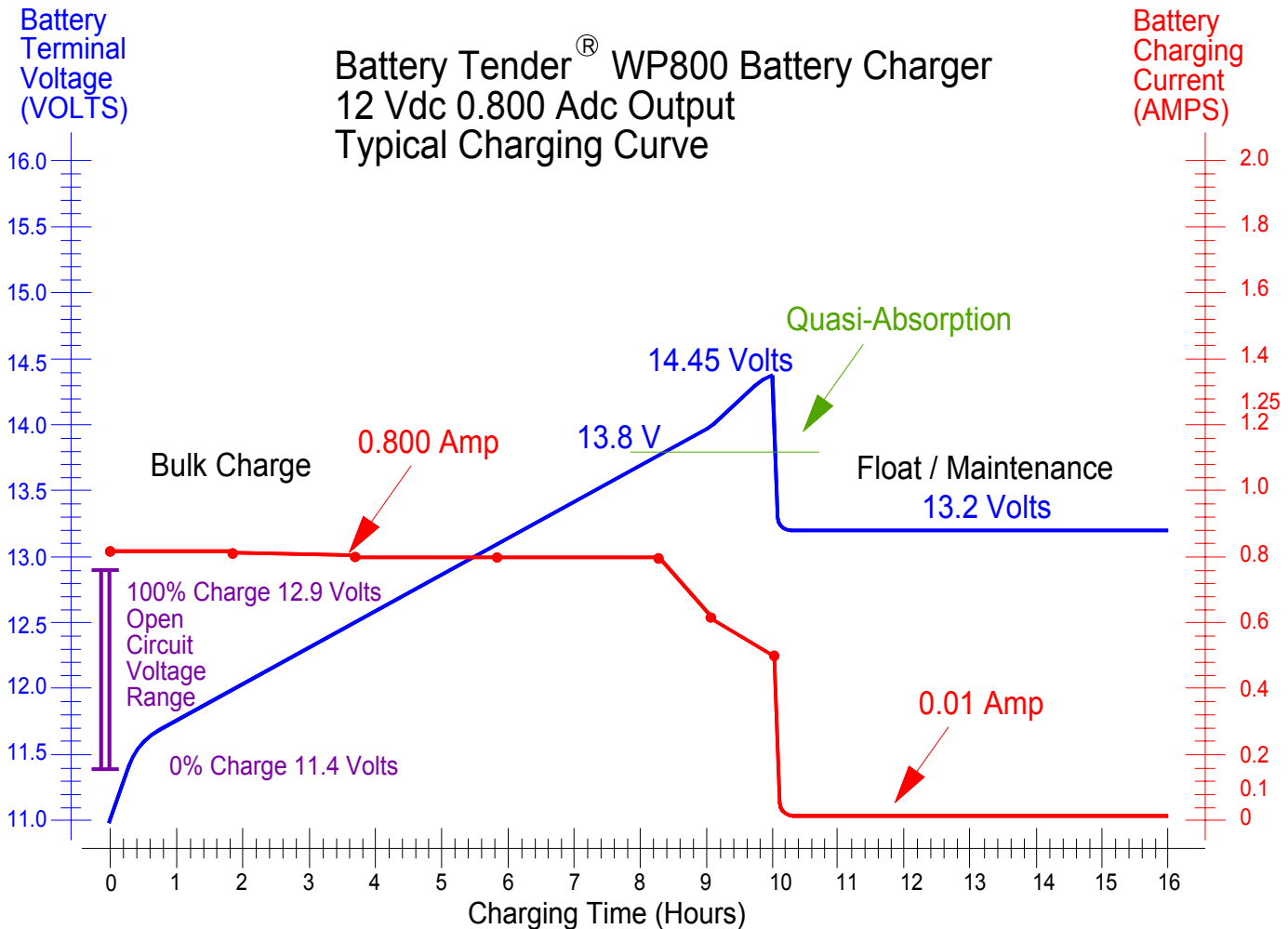
Battery Tender[®] International Waterproof Junior “Waterproof 800” 12Volt 0.800Amp Charge Curves

Stage 1) Qualification: Ensures safety by verifying battery status prior to charging.

Stage 2) Bulk Charge: Amber Light On, Green Light Off, Nearly Constant Current = 0.800 Amp. Transition to Stage 2.5 Absorption Charge when battery voltage reaches 14.1 VDC.

Stage 2.5) Absorption Charge: Technically, there is no clearly defined Absorption phase because there is no constant voltage period before the float / maintenance phase. However in the region where the battery voltage increases above 13.8 VDC, the normal minimum gassing voltage for a lead-acid battery, there is some absorption activity taking place in terms of the battery electro-chemical reaction to the higher voltage. Transition to Stage 3 Absorption Charge when battery voltage reaches 14.4 VDC.

Stage 3) Float Charge: Amber Light Off, Green Light On. Float Voltage = 13.2 VDC. If an external load is applied to the battery while the charger is in stage 4, Float Charge, and if the battery voltage drops below a range between 12.0 to 12.5 VDC, then the charge cycle restarts.



Charging Graph: Battery Tender[®] WP800

TROUBLESHOOTING INFORMATION:

1) THE CHARGER STATUS INDICATOR LIGHT FAILS TO TURN ON:

- a) Disconnect the charger AC power plug from the AC outlet and recheck that the battery charger alligator clips or ring terminals are connected to the correct polarity battery terminals and that they are making a clean, tight connection.
- b) Check the fuse in the battery charger connection cable.
- c) Check to make sure that the AC outlet is supplying power. Plug in another appliance like a lamp, or check the outlet voltage with a voltmeter.

2) THE STORAGE/FLOAT MAINTENANCE STATUS INDICATOR LIGHT (GREEN LIGHT) GOES ON IMMEDIATELY WHEN CHARGING A BATTERY KNOWN TO BE DISCHARGED:

- a) The battery may be defective. Have the battery tested.
- b) The electrical connections between the charger and the battery may not be completely secure.

3) AFTER THE STORAGE/FLOAT MAINTENANCE STATUS INDICATOR LIGHT (GREEN LIGHT) HAS BEEN ON, THE YELLOW LIGHT COMES ON.

- a) This is NORMAL OPERATION for the Battery Tender[®] International Waterproof Junior.
- b) There has been a momentary AC power failure that reset the charge cycle.
- c) There is some other load or appliance drawing power from the battery. When the battery voltage drops below 12.0V to 12.5V, the charge cycle resets.

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