



DELTRAN BATTERY CHARGER
INDICATOR LIGHT OPERATION SUMMARY



BATTERY TENDER® PLUS: TRUE GEL CELL MODEL

CHARGERS: Model: 12V 1.25A

Deltran Base PN 021-0156 (12V)

NOTE: In order to properly charge large capacity batteries, the charger may remain in the bulk charge mode for an extended period of time. For example, with a 1.25 amp DC current, and a 55 Amp-Hour battery, used for automotive engine start, the bulk charge period may last 40 to 45 hours.

SOFTWARE: GEL [Designed for true gel cell, sealed lead acid batteries.]
FOR ALL MANUFACTURER'S TRUE GEL CELL, SEALED LEAD ACID BATTERIES.

STATUS INDICATING LIGHTS OPERATION: 2 LIGHTS: RED & GREEN:

- < **RED - FULL RECHARGE (Automatic): BULK & ABSORPTION:** When the red light is on, the battery charger is in the process of fully charging the battery.
- < **GREEN FLASHING – ABSORPTION:** When the green light is flashing (and the red light is still on), the charger is in the constant voltage absorption mode. The charger automatically switches to float maintenance either 8 hours after the absorption mode begins or when the battery charge current drops to a very low level, below 0.05 to 0.100 Amp. Essentially this is a constant 8-hour period.
- < **GREEN – CHARGE COMPLETE: FLOAT / MAINTENANCE:** When the green light is on, the battery charger is in the storage / maintenance mode. In this mode the charger will maintain the battery at full charge by attempting to keep a constant voltage across the battery terminals. If the battery becomes partially discharged due to an external current draw or excessive internal battery losses, the charger will automatically switch itself back to the full recharge mode of operation.
- < **RED FLASHING – ERROR:** When the red light is flashing, the charger DC output is not connected to the battery. It is also possible that the battery is sulfated.
- < **RED & GREEN Alternating – ERROR:** When the red and green lights are alternating, the battery has been connected improperly. It is also possible that the battery is sulfated.

TRUE GEL CELL SOFTWARE: LED INDICATORS, VOLTAGES, CURRENTS, & TIMES

CHARGE MODE =>	BULK CURRENT	ABSORPTION TRANSITION	ABSORPTION VOLTAGE	STORAGE VOLTAGE (Float Maintenance)	FLOAT TO RECHARGE TRANSITION
AUTOMATIC MODE LED Indicator =>	SOLID RED	SOLID RED & FLASHING GREEN		SOLID GREEN	BACK TO SOLID RED
Output 12V @ 1.25A	1.25A	I<1.1A	14.2 to 14.3V	13.6 to 13.7V	Voltage Drops below approx. 12 V
Time Duration =>	72 Hour Safety Timer	Either 8 HOURS or the Time it takes for the Current to drop below 0.05 to 0.100 Amp. Essentially constant 8 hours.		INDEFINITE	Low voltage causes charger reset. Same for AC power interruption.