

# CAUTION

1. **SAVE THIS INSTRUCTIONS-** This manual contains important safety and operating instructions for the G100-XXL battery charger.  
Please read the caution of batteries or devices you want to charge firstly!
2. When charging, batteries can emit explosive gases, therefore it is essential to prevent flames and sparks. The charger is designed for charging specified Li-Ion/LiFePo4 batteries. Do not use for any other purpose.
3. Always provide good ventilation when charging.
4. Use of an attachment not recommended or sold by Green-Digital Power-tech may result in a risk of fire, electric shock or serious injury to persons.
5. To reduce risk of damage to electric plug and cord, pull by the plug rather than by the cord when disconnecting charger.
6. An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and electric shock. If extension cord must be used, make sure that: a) Pins on plug of extension cord are the same number, size and shape as those of plug on charger; b) Extension cord is properly wired and in good electrical condition; and c) Wire size is large enough for ac ampere rating as specified in "technical data".
7. Do not operate charger with a damaged cord or plug-return the charger to the place where purchased.
8. Never operate the charger if it has received a sharp blow, been dropped or otherwise damaged in any way; take it to a qualified serviceman.
9. Do not disassemble the charger; take it to a qualified serviceman when service or repair is required. Incorrect reassembly may result in a risk of electrical shock or fire.
10. To reduce risk of electric shock, unplug charger from AC outlet before attempting any maintenance or cleaning. Turning off controls will not reduce the risk.

## G100-XXL 12.8V~38.4V (4s~12s) Li-Ion/Polymer/LiFePo4 Battery Charger

# User's Manual



May, 2011 Version 1st

Brief Introduction

G100-XXL is a main member of digital-chargers from Shenzhen ABT Electronics CO.,LTD . It represents today's new technology for 12.8V(4s) ~ 34.8V(12s) Li-Ion/Polymer/FePo4 battery pack charging. G100-XXL programmed 3 auto stages ( Ip-Im-Um) charging process, It is designed for 3~25Ah Li-Ion/Polymer/LiFePo4 battery pack. Stage "Ip" is a pre-charge function for deep discharged battery pack, this is helpful for battery's cycle life. When the battery recovered by pre-charge small current, stage "Im" will give bulk current charging. Then, "Um" stage is followed, the output voltage is limited on 14.4V(for 4S LiFePo4) or 16.8V(for 4S Li-ion/polymer), until the charge current declined to 0.4A. At this stage, the battery is charged completely and the charger will cut off output automatic.

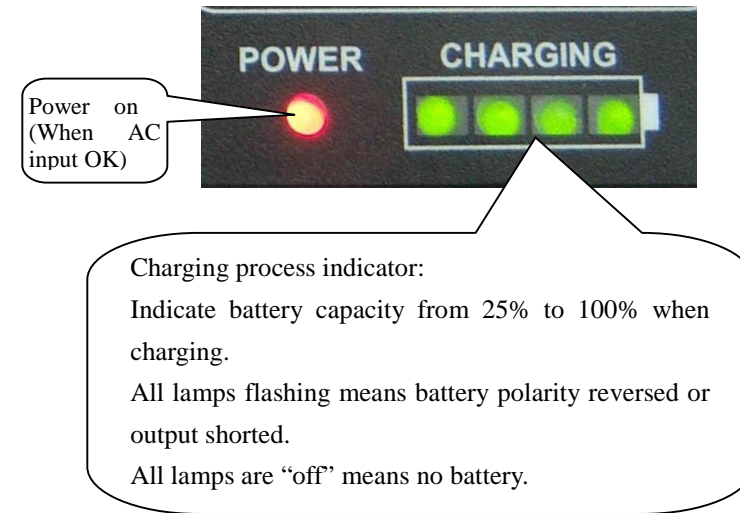
Further, G100-XXL can display the charging process, indicate the battery capacity from 25% to 100% timely. This is helpful for user.

For more safety, G100-XXL will inter protection mode when the battery polarity reversed our the output connectors shorted.

#### Specification for G100-XXL

Input Voltage	100-240VAC, 50-60Hz			
Input Current	1.6A			
Back current drain 1)	<1mA			
Charge voltage limit	G100-12LF	G100-24L	G100-36L	G100-36LF
	14.4V+-1%	29.4V+-1%	42V+-1%	43.2V+-1%
Bulk charge current	4.5A+-5%	2.8A+-5%	1.8A+-5%	
Operate Temperature	-20℃~50℃			
Cooling	Natural convection. Do not cover the charger.			
Charge principle	Auto 3 stages: Ip-Im-Um Cut-off when charge finished.			
Battery type	From 12.8V(4s) to 38.4V(12s), Li-ion/Polymer/LiFePo4			
Battery capacity	3-25Ah			
Size	170X70X51mm			
Enclosure	IP54 (Dust protected, Water splashing resistance)			
Weight	400g			

#### Display Panel



#### How to use:

1. Connect the AC cord to the socket, The "power" lamp will light on solid.
2. Connect positive charger clip (red) to positive battery terminal, the black clip to negative. (You can use other dc plugs to connect battery), the "25%~100%" lamps will light on flowing. If the battery polarity reversed or output shorted, "Warning" lamp will flashing, please check the setup.
3. Depend on the charged capacity, 25%~100% lamps will lights up solid sequence, until the battery is fully charged. Then you can power off the charger and disconnect the battery or you can charge a new battery if you need.

The table shows the duration of 80% state charged for an empty battery.

Battery cap.	G100-12LF	G100-24L	G100-36L
3.2Ah	Not recommend	1.5 hours	2 hours
7.0Ah	2 hours	3 hours	4 hours
12Ah	3 hours	5 hours	7 hours
25Ah	6 hours	10 hours	13 hours