

CAUTION

1. **SAVE THIS INSTRUCTIONS-** This manual contains important safety and operating instructions for the G100-XXA 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 lead-acid 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 us or which we not approve 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-XXA 12~36V Lead-Acid Battery Charger

User's Manual



Brief Introduction

G100-XXA is a main member of digital-chargers from Shenzhen ABT Electronics . It represents today's new technology for lead-acid type battery charging. G100-XXA programmed four auto stages (Ud-Im-Uo-Up) charging process, It is designed for all kinds of 12V~36V lead-acid battery, such as SLA, AGM and Gel battery. Stage "Ud" desulfurating the battery through 18V pulse (for 12V battery), When the battery recovered, stage "Im" will give bulk current charging. Then, "Uo" stage is followed, the output voltage is limited on 14.7V(for 12V battery); When the battery is nearly full, stage"Up" will turn on duty. At this stage, the battery is charged completely and the charger give some pulse to maintenance the battery.

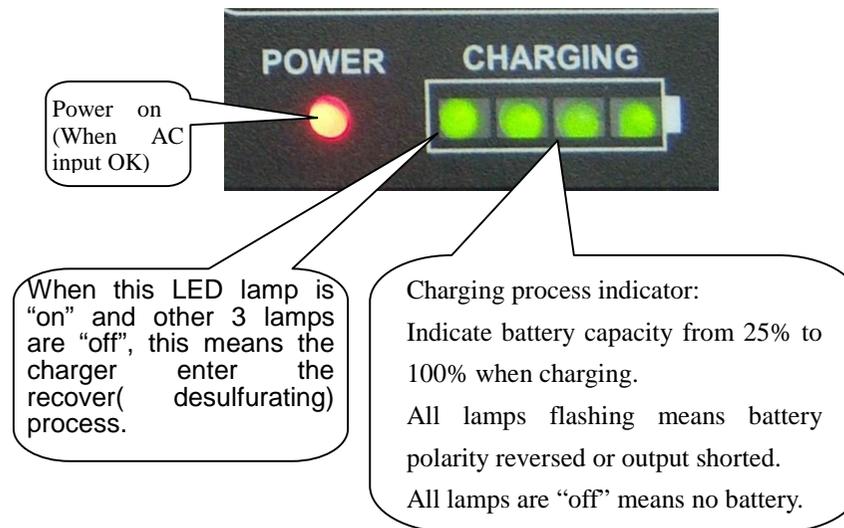
Further, G100 can display the charging process, indicate the battery capacity from 25% to 100% timely. This is helpful for user.

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

Specification for G100-XXA

Input Voltage	100-240VAC, 50-60Hz		
Input Current	1.6A		
Back current drain	1.3mA		
Charge voltage	G100-12A	G100-24A	G100-36A
Limited	14.7V+1%	29.4V+1%	44.1V+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 4 stages: Ud-I-Uo-Up		
Battery type	All types of 12V lead-acid batteries.(SLA, Gel, AGM....)		
Battery capacity	7-80Ah		
Size	170X71X51mm		
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, all lamps 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 type (Ah)	G100-12A	G100-24A	G100-36A
12	Not recommend	5 hours	7 hours
22	5 hours	9 hours	12 hours
40	9 hours	14 hours	20 hours
80	16 hours	Not recommend	Not recommend