



Application: 12 Volt Systems

12 Volt Battery Charger

Part Includes

1 - 12V Battery Charger



Tools Needed

SAVE THESE INSTRUCTIONS:

PLEASE READ ALL THE CAUTIONS FROM THE BATTERY YOU ARE WANTING TO CHARGE BEFORE BEGINNING!

NOTE 1:

Always provide good ventilation when charging.

NOTE 2:

When charging, batteries can emit explosive gases, therefore it is essential to prevent open flames and all sparks. This charger is designed for charging lead-acid batteries from 2 to 90 Ah. Do not use for any other purpose.

NOTE 3:

Use of any other attachment is not recommended and may result in a risk of fire, electrical shock or serious injury.

NOTE 4:

To reduce risk of damage to the electrical plug and cord, when disconnecting pull by the plug rather than by the cord.

NOTE 5:

An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of fire or electrical shock. If an 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 the plug on the charger; b) The extension cord is properly wired and in good electrical condition; c) Wire size is large enough for AC ampere rating as specified in "technical data".

NOTE 6:

Never operate the charger with a damaged cord or plug if it has received a sharp blow, been dropped or damaged in any way; take the charger to a qualified serviceman.

NOTE 7:

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.



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12 Volt Battery Charger (cont.)

NOTE 8:

To reduce the risk of electrical shock, unplug charger from AC outlet before attempting any maintenance or cleaning. Turning off controls will not reduce the risk.

INTRODUCTION:

This charger has 4 programmed auto stages: **Ud-I-Uo-Up**. It is designed for all kinds of 12V 2~90Ah lead-acid batteries, such as SLA, AGM and Gel batteries. Stage "Ud" - desulfurates the battery through 20V pulses. When the battery is recovered, stage "I" will give bulk current charging (0.8A or 3.3A, defined by user, for 2~8Ah select 0.8A, for 12~90Ah select 3.3A). Then, "Uo" stage is followed, the output voltage is fixed on 14.4V (Use 14.7V for temperatures below 5°C). Stage "Up" begins when charging is complete, the charger will maintain a pulse to keep the battery fully charged.

INSTRUCTIONS:

STEP 1.

Connect positive charger clip (red) to positive battery terminal, the black clip to negative battery terminal.

STEP 2.

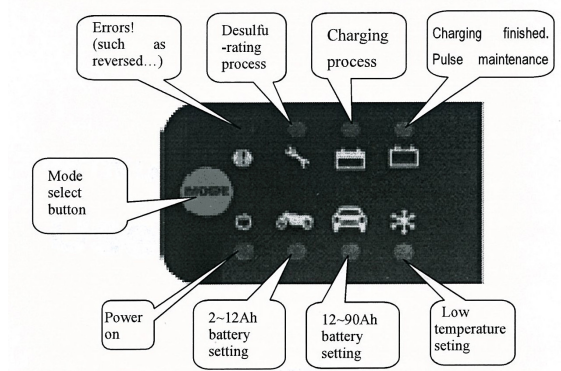
Connect the AC cord to the socket, if the polarity is reversed, the red alarm indicator light will indicate that the battery is improperly connected.

STEP 3.

Press the "MODE" button to cycle through modes until the required charging mode is selected.

STEP 4.

When the "charging finished" LED lights up, the battery is fully charged. Disconnect in reverse sequence from connecting procedure.



SPECIFICATIONS:

Input Voltage	100-240VAC, 50-60Hz
Input Current	1.1A
* Back current drain 1)	1.3mA
Charge voltage	Rating 12V, Bulk 14.4V/14.7V (14.7V for low temperature)
** Ripple 2)	Voltage-ripple 50mV rms, Current-ripple 0.13A
Charge current	0.8A (2~8Ah, for Motorcycle) 3.3A (8~90Ah, for Car batt)
Operate Temperature	-20°C~50°C,
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	2-90Ah
Size	120X67X41mm
Enclosure	water-repellent
Weight	275g

TIME TABLE TO REACH 80% CHARGE:

Battery type (Ah)	MODE	Time (hours)
2		2-3
8		8-10
14		3-4
50		12-14
90		23-26

* Back current drain: The current that the charger uses from the battery when the wall plug is not connected.

** Ripple: Describes how many disturbances are exhibited by current and voltage. A rippled voltage can cause damage to other equipment connected to the battery.