CH1112/CH1124/CH2112/CH2124

Automatic Battery Charger User Manual

KUTAI ELECTRONICS INDUSTRY CO., LTD.
TEL : +886-7-8121771 FAX : +886-7-8121775 Website : www.kutai.com.tw
Headquarters : No.3, Ln. 201, Qianfu St., Qianzhen Dist., Kaohsiung City 80664, Taiwan

SECTION 1 : SPECIFICATION

1.1 Model Specification

Model	Input Voltage (AC)	Output Voltage (DCV)	Available Battery (V)	Output Current Max. (A)	Fu Fuse Spec. (A)	Power Consumption (W)	Weight (kg +/- 2%)
CH1112E	1 Phase 110V 50/60 Hz	13.8	12	10	5	230	6.8
CH1124E		27.6	24	10	5	340	7.2
CH2112E	1 Phase 220V 50/60 Hz	13.8	12	10	5	230	6.8
CH2124E		27.6	24	10	5	340	7.2

1.2 Charge mode : Floating Charge.

1.3 Unit Power Dissipation : Max. 92 watt

1.4 Environment :
- Operation Temperature -20 to +60 ˚C
- Storage Temperature -20 to +40 ˚C
- Relative Humidity 20 to 90%

1.5 Protection :
- Fixed voltage, current limited, auto-feedback.
- Fuse protected Ø6 * 30mm.
- Reverse polarity protected.
- Short-circuit protected.

1.6 Size : 245.0 (L) x 158.0 (W) x 192.0 (H) mm

SECTION 2 : OPERATION PROCEDURE

2.1 Ensure the type and output voltage before power on.

2.2 Connect charger-line (accessory) with +/- terminals. Warning : +/- terminals should not be shorted !

2.3 Plug in then switch on, voltage meter should be read by 13.8V (12V) / 27.6V (24V).

2.4 If output voltage correct then power off. Connect the red side of the charger-line to the "+" terminal of the battery, the black one to the "–" terminal.

2.5 Power on then charging is starting, the more charge current the less time needed, current is adjusted by current-adjust-knob on the panel. For the long time charging, we suggest the current less than 1A.

2.6 Factory setting of output voltage is 13.8V or 27.6V, on the conditon of old batteries the voltage can be boost by turning the VR from the hole located on the panel.

CAUTION *!!* High voltage will cause batteries liguid vaporized and batteries damaged.

2.7 Our charger has voltage-feedback-sensor to avoid batteries be over-charged, if the battery is full charged then output current will be reduced to zero, in order to extend the life of the battery.

SECTION 3 : NOTICES

3.1 Avoid to place the charger in the environment such as high temperature, humidity, acid & alkali, Prevent from insolation, drench and caustic.

3.2 AC input voltage should fit the charger type. We suggest to install a protection device (such as MCCB) inter AC power and charger.

3.3 Never depart the charger.

3.4 Never change internal wiring of the charger.

3.5 Never adjust internal VRs of the PCB intentionally.

3.6 Routine-check of output voltage is necessary.

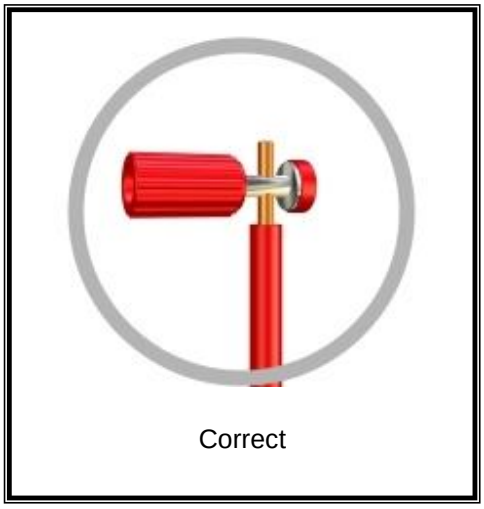
3.7 Terminals of the charger and polarities of the battery should be connected correctly, red to “+”, black to “–”.

Warning : Never short “+” (red terminal) and “–” (black terminal) polarities.

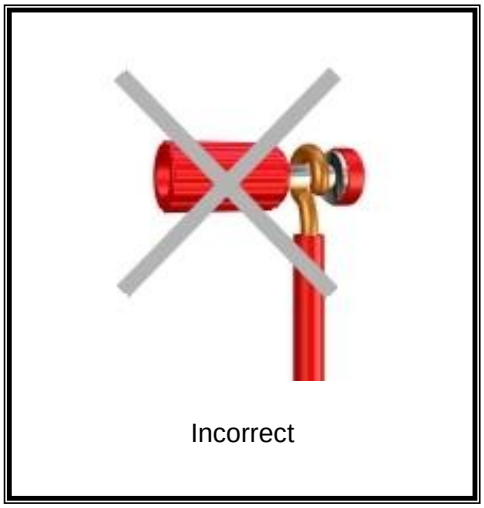
3.8 Please operate the charger under the max. maximum capacities.

3.9 Beside charge battery, please do not use charger for other purpose.

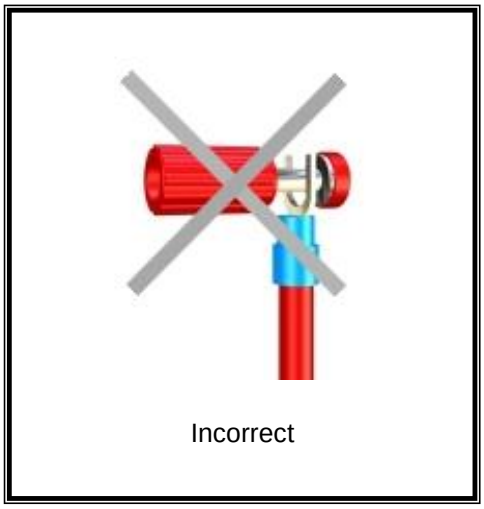
3.10 When install the output connect wires, please references the figure below.



Correct

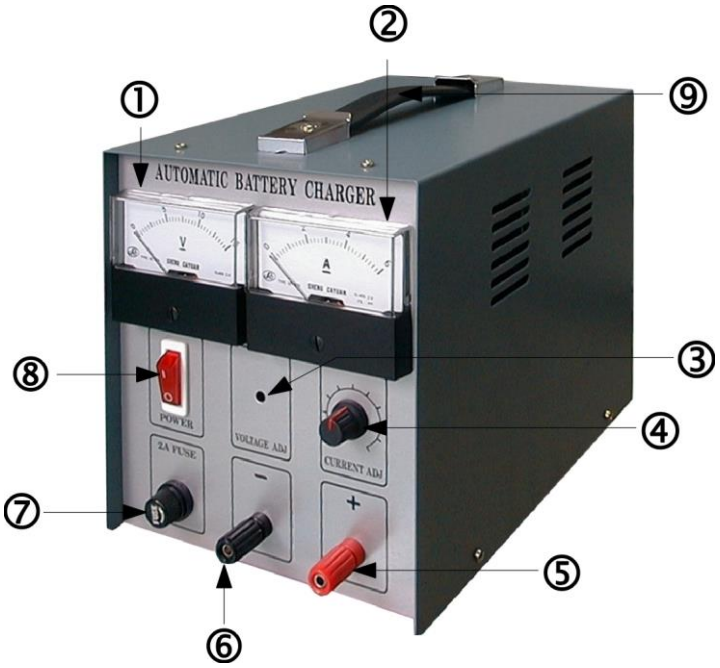


Incorrect



Incorrect

SECTION 4 : OUTLINE



(1) Voltage Meter.

(2) Current Meter.

(3) Voltage Adjustment VR (inside-mounted).

(4) Current Adjustment Button.

(5) Output terminal (Red).

(6) Output terminal (Black).

(7) Fuse.

(8) Power Switch & Lamp.

(9) Handle.

SECTION 5 : TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSES
No output voltage	1. Check AC Power.
	2. Check fuse.
	3. Charge-line if poor connection or not.
	4. Check if short exists or not.
	5. Check if polarities are oppositely or not.
No charge current or the current is unable battery properly	1. Check if battery is full charged or not.
	2. Check if poor connection exists or not.
	3. Check if the type and the rate of the charger are correct or not.
	4. Check if battery is out of order or not.

※ If these steps above could not make the charger working still, Please contact with KUTAI.

※ Please accept our sincere apology if any modification in performance, specification or appearance is made without prior notice.