HiTech Power Solutions

Specialists in RV Electrical & Electronic Components

30 A Lithium Smart Charger

INSTRUCTIONS

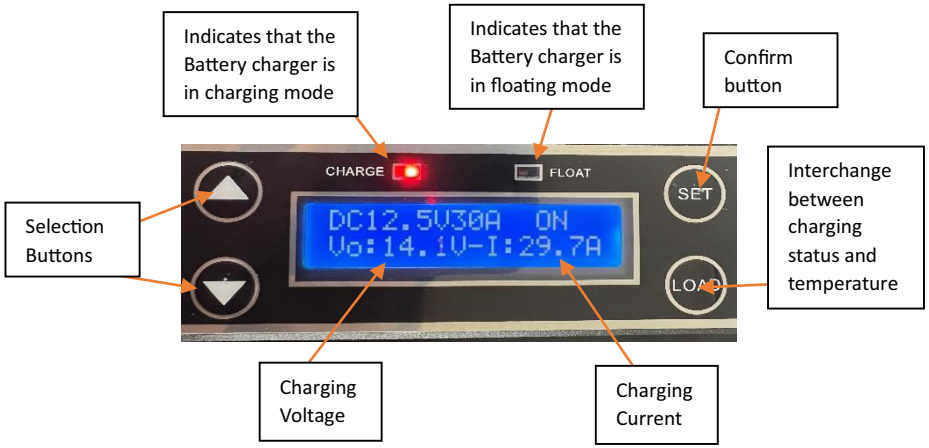
Please read this operating instruction carefully proper use.
Please remember to read the “Safety Precautions” before you use to ensure the safety.

Common Issues and Solutions

Problem		Reason	Solution
It doesn't charge even though the charging clamp and battery are properly connected		The electrode is reversed	Correct the wiring method
		Battery charging voltage is less than DC 6.5V	Try to repair the battery, if the repairing wasn't successful, you need to replace the battery.
Charging errors	Battery Error	Connection is not fastened properly	Check and re do the wiring correctly
		Battery doesn't get charged	Try to repair the battery if it is a maintained one or else replace.
	Current Error	Selected charging current is too low	Choose a higher charging current
		Connected incompatible electrical equipment	Check the battery voltage, the charger is only suitable for DC 12 V batteries.
	Over Voltage	Connected incompatible electrical equipment	Disconnect all incompatible electrical appliances
	Over Heat	The charger is in a compact and unsuitable environment	Clear the dust in air vents or remove the charger cover, Put the charger in a cool place, when the temperature drops to the required amount, the charger will automatically start.
	Over – charged protection	The charging time exceeded 24 hours	Check the battery charging status regularly
		Charging current is too low	Choose the appropriate charging current
		A battery unit has been damaged	Replace the battery, Correctly handle the damaged battery

Model Number	HT 1230
Input Voltage	AC 180V – 240V 50Hz
Input current	8A
Maximum current output	30A
Charging Voltage	Lithium Iron Phosphate Battery 14.4+- 0.05VDC
	Lead Acid Battery 13.8+- 0.05V DC
Battery type	
Working temperature	-10ºC - 40 ºC
Storage temperature	-20ºC - 70 ºC
SIZE (Length*Width*Height)mm	285*127*65
Weight	1.8 Kg

1. Digital Display

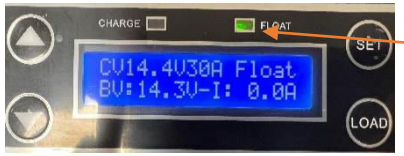


2. First set the settings accurately through the digital display according to the type of your battery (Instructions given below) type. Then connect the battery charger to the battery and turn on the battery charger.

3. Battery Charger Status (Charging / Charged)

RED INDICATOR:

Charging mode



GREEN INDICATOR:

Floating mode (Nearly/Fully Charged)

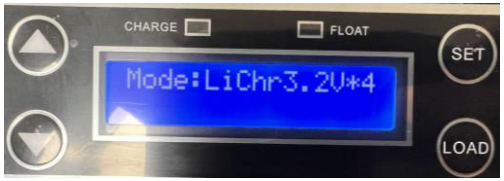
4. Power Supply Mode

- Turn on the charger and press the **SET** button once.
- The First option that is displayed as DC 12.5 V is the power supply mode to use your battery charger as a 12Vpower supply.
- Press the **SET** button once again to confirm.
- Then your battery charger will work as a 12 V power supply.
- Use the ▲ and ▼ buttons to select a current capacity within the range of 2 Amp to 30 Amp depending on how much current you want to draw out of the charger.'

5. Gel/ Flooded or SLA mode (Lead acid and other)

- Turn on the battery charger and press the **SET** button once.
- Use the ▲ and ▼ buttons to select between the modes until you get the **PbChr 12 V/1** mode on the display.
- Press **SET** to confirm the mode.
- Once again use the ▲ and ▼ buttons to change between **GEL, FLOODED and SLA** according to your battery type.
- E.g.: if you have a Lead Acid battery, select Flooded and press **SET** to confirm.
- Use the ▲ and ▼ buttons to select a current capacity within the range of 2 Amp to 30 Amp depending on how much current you want to draw out of the charger.
- Press **SET** to Confirm

6. Lithium Battery Charging mode



- Turn on the battery charger and press the **SET** button once.
- Use the ▲ and ▼ buttons to select between the modes until you get the **LiChr3.2V*4** mode on the display.
- Press **SET** to confirm the mode.
- Use the ▲ and ▼ buttons to select a current capacity within the range of 2 Amp to 30 Amp depending on how much current you want to draw out of the charger.
- Press **SET** to Confirm

Safety Precautions

Pay attention to the following safety precautions to avoid electric shock, fire and personal injury, when using the charger.

- Check the voltage supply and plate name on the charger indicate the same voltage.
- Make sure that there are no short circuits.
- The Red and Black clips should not touch each other when connected to the charger
- Put all cables in place after using and disconnect all cables during cleaning and maintenance.
- Keep the charger where children cannot reach
- If the product got damaged due to over voltage or any other means, do not re- use it for battery charging.
- Avoid touching the DC side and AC side when the conductor is exposed.
- Make sure the charger and cables are dry before using and do not keep /store the charger in corrosive, salty or humid environments.
- Ensure there is good ventilation and that the charger is at least 5 cm away from the objects around.
- Do not use the charger in flammable or explosive gas containing environment such as the gasoline powered ship's bilge or propane stored tanks.
- Keep the charger disconnected from power when not in use.
- This charger cannot recharge disposable batteries; it might cause the battery to explode.
- Do not use this charger to recharge lithium batteries without a BMS in them (Battery Management System) and Non-rechargeable batteries, as it might cause the battery charger to explode.

Output Current

When the charger is connected to the power supply, the output automatically will be in the default mode. It will automatically select the appropriate charging current output. The use also can manually select the charging mode by pressing the ▲ and ▼ arrows to select a charging current within the range of 2Amp to 30 Amp.

MODEL Number		HT 1230 Ac
Automatic Selection	Automatic Selection	2A
	Maintenance Selection	12A
	Regular Selection	20A
	Fast Selection	30A
Constant current charging current		2A to 30A
Constant voltage charging Floating current Charging		2A to 5A
Floating current charging Constant-voltage charging current		2.5A to 8A

Fan Control Function

In the normal charging process, the fan will automatically turn on when the current is more than 5A and will automatically turn off when the current is less than 5A.

Minimum Starting Voltage

When the charger is connected with a battery, the battery needs to have a minimum voltage (or other DC power supply), of 6.5V DC or above.