





## PRODUCT OVERVIEW

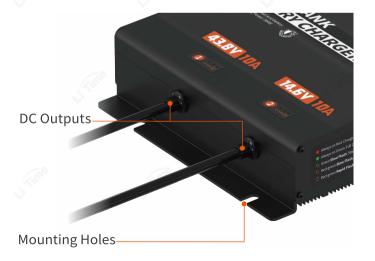
M8 Battery Terminals



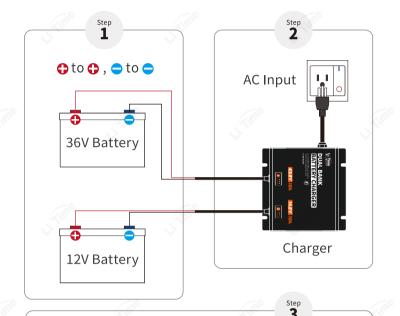
9.06" [230mm]

-15A Fuses

#### DC SIDE



## **HOW TO CONNECT**





- Connect the M8 battery terminals of the charger to the batteries, to , to •.
- **2** Plug the AC plug to the grid power.
- Select the suitable battery types by short pressing the button, then press and hold it or wait for 60 seconds to save the battery types.

## **BUTTON OPERATION**

	Button  1	Charger Status	Operation	Function
		The charger is on set mode. (The LED is in red-green rapid flash.)	Short Press	Select the Battery Type
			Press and Hold (or wait for 60 seconds)	Save the Battery Type
		The battery is in charging. (The LED is always on red.)	Short Press	
			Press and Hold 1 <sup>st</sup> Time	Stop Charging
			Press and Hold 2 <sup>nd</sup> Time	Enter the Set Mode
			Press and Hold 3 <sup>rd</sup> Time	Save the Battery Type or Resume Charging

## **LED INDICATOR**

LED Status	Charger Status
<ul><li>Always on Red</li></ul>	Battery is charging.
<ul><li>Always on Green</li></ul>	Battery is fully charged.
Green Slow Flash	Charger is on standby.
• Red-green Slow Flash	Charging is stopped manually.
Red-green Rapid Flash	The charger is in Set or Protection mode.

### **REGISTER WARRANTY**



Shenzhen Litime Technology Co., Ltd If you have any questions or need any help, please contact us at service@litime.com

## **SPECIFICATIONS**

Input	90V to 260V AC, 47Hz to 63Hz	
Input Current(AC)	7A/115V, 3.5A/230V	
Output Voltage(DC)	43.8V+14.6V/LFP, 42V+16.8V/NCM, 44.1V+14.7V/Lead Acid	
Max. Charging Power	441W+168W	
Output Current	10A*2	
Protection Class	IP65	
Temperature Range	Operating: -20°C to 40°C/-4°F to 104°F Storage: -40°C to 70°C/-40°F to 158°F	
Dimensions	L9.06*W9.08*H2.64 inches L230*W230.6*H67 mm	
Net Weight	Appr. 8.82 lbs / 4kg	

Note: This battery charger supports activating the BMS of the lithium battery.

## CHARGING MODES<sup>1</sup>

#### Pre-Charge Stage (T1)

When the battery voltage is lower than its normal standard and cannot withstand high-current charging, the charger will charge it at a limited current.

This charging mode will be able to activate and repair the lithium battery and extend the lithium battery's lifetime. When the output voltage reaches the normal value, the charger will automatically switch to the next stage.

#### Constant Current Charging Stage (T2)

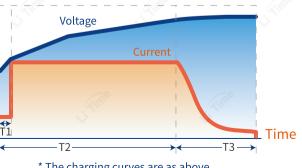
When the battery is in the main charging time, the charger will charge the battery with a 10A current for each bank. When the battery voltage rises above the set value, the charger will automatically switch to the next

#### Constant Voltage Charging Stage (T3)

The charger switches to the Constant Voltage Charging Stage and the charging current gradually decreases. When the charging voltage or current reaches the set value, the charger automatically turns off the output voltage and the battery charging is completed.

①The above charging modes are suitable for LFP and NCM battery types. For lead-acid battery type, an additional float charging stage will be included.

#### Voltage & Current



\* The charging curves are as above.

# **MAINTENANCE** & USE PRECAUTIONS

- 1. Check the battery specifications carefully before charging to ensure that the battery matches the charger technical data, connect the 36V battery to the ① charging channel and the 12V battery to the ② charging channel, please note that the battery voltage needs to match the charger voltage.
- 2. Make sure the charger is properly connected to the battery ( to to to o) to avoid a short circuit.
- 3. The input/output connectors must be firmly connected during charging.
- 4. Unplug the input/output cable of the charger immediately once the charger or battery is found to be abnormal or damaged during charging.
- 5. **Do not** use other input cables or extend the output connection cable personally, or please contact LiTime at **service@litime.com** to get some advice if you need it.
- 6. **Do not** open, dismantle, or modify the charger.
- 7. Never use it in a thunderstorm.
- 8. Please keep the charger and battery away from heat sources, sparks, flames, flammable gas, and hazardous chemicals.
- 9. **Do not** puncture, drop, crush, burn, penetrate, shake, strike, or throw it with force.
- 10. Place the charger in a well-ventilated area with sufficient heat dissipation to prevent overheating and
- 11. Make sure the positive lugs of the charger are not touching the negative lugs before the charger connect to shore power.

#### **TROUBLESHOOTING**

If the charger does not work properly, the following methods can help you solve the general problem quickly. If you still cannot rule out the possibility of failure, please contact LiTime at service@litime.com.

	Problem	Possible Cause	Solution
	The charger is not charging for the battery after connected to shore power.	Poor connection with battery	Make sure connections are correct and tight.
	The battery is not fully	Batteries are aged or damaged	Replace a new battery.
	charged after a long time charging.	Improper battery type choice	Select the correct battery type.
		Overtemperature	Disconnect the battery to the charger, and cool the charger down.
	Enter set mode after automatic restart, red and green lights flash rapidly alternately.	Over current Over current	Restart the charger.
		Over voltage/ Under voltage	Reconnect the suitable battery to the charger.
		Reverse connection	Connect the battery with the charger correctly ( to . to . and retry.
		Short circuit	Make sure the positive lugs of the charger are not touching the negative lugs.
	The charger cannot activate the BMS of	The charger has not been restarted	Restart the charger.
	the lithium battery.	The battery is damaged	Replace the battery.