

User Manual



DC24V Battery Charging TCI-EN6500BC

Safety Notes

- ※ Be sure to read the contents of this manual carefully before use.
- ※ It is important to follow the instructions in this manual as it contains important safety symbols, messages and precautions.
- ※ We also recommend that you carry this instruction manual with you for future reference.

Warnings



This symbol is intended to alert the user to the important operating and maintenance (servicing) instructions in the literature accompanying the equipment.



This marking is intended to alert the user to the presence of uninsulated "hazardous voltage" within the product's enclosure, which may be sufficient to pose a risk of electric shock to a person.

Equipment Installation

- ※ Do not expose the unit to rain or environments where it may be splashed with water or other liquids, as this may cause fire or electric shock.
- ※ Use the equipment only at the voltage specified on the equipment; using a higher voltage than specified may result in fire or electric shock.
- ※ Do not cut, kink or damage the power cord. In addition, avoid using the power cord in the vicinity of the heater, and never place heavy objects (including the unit itself) on the power cord, as this may cause a fire or electric shock.
- ※ Be sure to replace the terminal cover of the unit when the connection is complete, and do not touch the speaker terminals because of the high voltage applied to them to avoid electric shock.
- ※ Be sure to ground to a safe grounding terminal to avoid electric shock, and never ground the air hose, as this could result in a catastrophic disaster.
- ※ Avoid installing the unit in an unstable location, such as on a rickety table or inclined surface, as this may cause the unit to fall, resulting in personal injury or property damage.

Utilization equipment

- ※ If any of the following abnormalities are found during use, immediately turn off the power, unplug the power plug from the AC outlet, and contact your nearest dealer, and do not attempt to operate the unit under such conditions, as this may cause fire or electric shock.
- ※ If you notice that the unit is smoking or emitting an odor.
- ※ If water or any metal object enters the unit.
- ※ If the unit is dropped or the unit housing is cracked.
- ※ If the power cord is damaged (core exposed, disconnected, etc.).
- ※ If a malfunction occurs (no sound).
- ※ To prevent fire or electric shock, never open or remove the unit's case, as there are high-voltage components inside the unit, and refer all service to your nearest dealer.
- ※ Do not place cups, bowls, or other containers holding liquids or metal objects on top of the unit; if they are inadvertently spilled into the unit, they could cause a fire or electric shock.
- ※ Do not insert or drop metal objects or flammable items into the gout slots in the cover of the unit as this may cause fire or electric shock.

Warranty

- We warranty the products it manufactures to be free from defects in material and workmanship for a period of 3 years for parts replacement, two years for parts repairs, and six months for accessories from the date of invoice. This warranty does not cover damage or malfunctions due to alteration, misuse, abuse, misapplication, negligence, accidents, or any cause other than defects in the product.
- We will replace or repair products covered by this limited warranty that are returned to our facility if they are defective in material and workmanship under normal use and conditions.
- To request warranty service, you must contact our sales team within the warranty period to send the product back to us in its original or equivalent packaging (freight prepaid), and the warranty period will not be extended if we repair or replace the product.

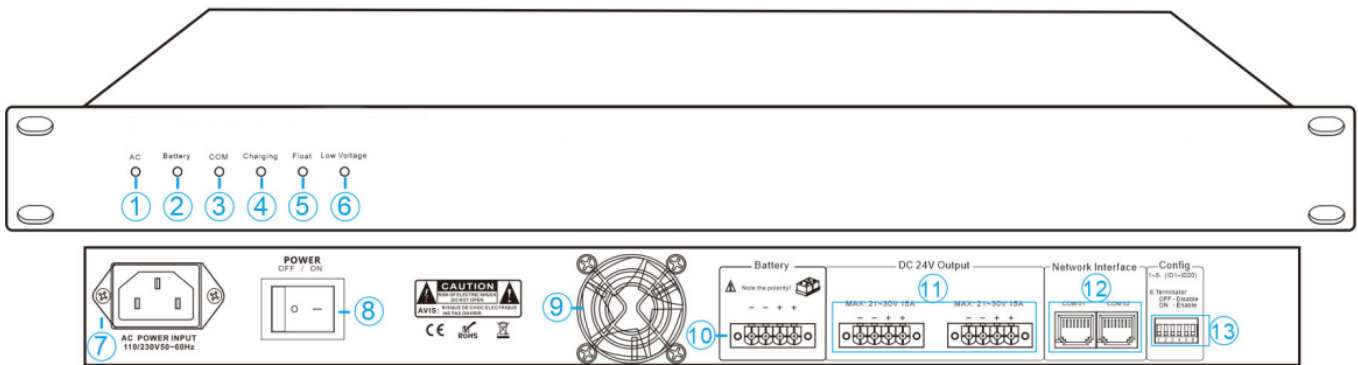
Disclaimers

- The information contained in this manual is subject to change without notice and does not represent a commitment on the part of the seller, and we shall not be liable for any loss or damage arising from the use of the information or any errors contained in this manual.
- It is recommended that all servicing and repairs of this product be carried out by us or an authorized dealer, this product should only be used for the purpose specified by the manufacturer and in conjunction with this operating manual, and we shall not be liable for any loss or damage arising out of the servicing, maintenance or repair.

Product Features

1. Auto switch into DC power supply when AC power fails
2. Select auto/manual charging mode automatically
3. Storage battery failure, over voltage, over-heat and over time charging detection
4. Automatic temperature control fan and over heat protection
5. Built-in battery charge management and monitoring circuit
6. When connected to AC power, DC24V will be off automatically
7. Storage battery support two or one DC 24V lead-acid battery
8. Selection charging mode automatically to ensure safety charging and service life
9. Pre-charge-constant current-trickle charge
10. High charging efficiency and restore efficiency
11. Support multiple volumetric battery \leq 200Ah
12. With ID pre-set its zone number up to 200 units
13. With RS485 to communicate with third party system

Front and Rear Panel



1. Device AC power status indicator light

Green - AC power is normal;

Yellow - AC power failure;

2. DC status indicator light

Green - DC power supply is normal;

Yellow - DC power failure;

3. Device online status indicator light

Green - The connection between the device and the host is normal;

Yellow —The device is offline

4. Charging status indicator light

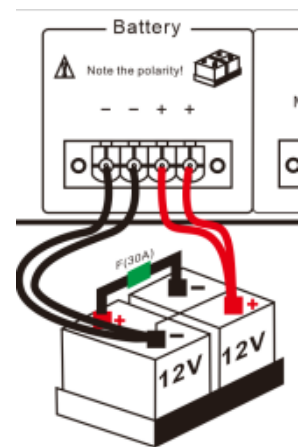
Green - the device is charging the battery (when the device is fully charged, this light and " will switch back and forth, which is a normal state);

Off - the battery is fully charged or the battery is not connected;

5. Battery maintenance charging indicator light

Green - the device enters the maintenance charging state (when the device is fully charged, the light and " will switch back and forth, which is a normal state);

Off - the device has not entered the maintenance charging state;



6. Battery low voltage indicator light

Yellow - indicates that when the voltage at both ends of the battery is lower than 21V, this light will light up and the output will be turned off to protect the battery from over-discharge;

Off - indicates that the voltage at both ends of the battery voltage is within the normal range;

7. Device AC power input interface

8. Equipment AC power switch, when it is '0', it means turning off the AC power input (note that this switch cannot turn off the battery input)

9. Fan

10. Lead-acid battery interface (please pay attention to the polarity, use 2 cells of 12V in series), the connection method is shown in the figure on the right <It is recommended to connect a fuse in series between 2 cells>:

11. DC24V output interface (please pay attention to the polarity, and the total output current should not exceed 30A, and the output current of a single terminal should not exceed 15A;

12. Device plus Online interface;



13. Device DIP configuration:

Bits 1 to 5 are used to configure the communication ID, and the address range is: 0 to 9, that is, 1 to 10;

Bit 6 is used to control whether to connect the terminal matching resistor. Please note that it must be the last device. If the device is connected in a loop, this bit does not need to be configured. It is only used for open loop.

Specification

Model	TCI-EN6500BC
Power Supply	220V-240V, 50/60Hz
AC Maximum Current	2A
AC Fuse	250V/3.15A, low speed type
DC Power Output	24V DC battery
DC Maximum Current	10A+10A
Maximum Charging Current	10A adjustable
Connector	Two battery inputs, two 24V DC outputs, two RS485 and two CAN inputs. Battery capacity selector and ID selector.
Cooling System	Speed controlled cooling fan
Operation Temp	+5°C to +45°C
Operation Humidity	<95%
Dimension(mm)	484(W)×450(D)×44(H)
Weight	4.5KG

 **Warning** 

To avoid electric shock, please do not open the chassis cover by yourself. When the equipment malfunctions, please contact an agent or manufacturer to provide repair services, or entrust professional personnel with professional certificates from professional departments to carry out repairs. Non professional personnel are not allowed to disassemble the machine on their own to avoid electric shock accidents that may endanger the safety of operators.