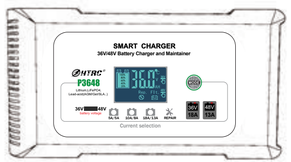
HTRC® USER MANUAL

P3648

SMART CHARGER

36V/48V Battery Charger and Maintainer

36V 18A | 48V 13A





Technical Specifications

AC Input Voltage: 100-240V~50/60Hz

Battery Chemistries: Lithium, LiFePO4, Lead-acid (AGM, GEL, EFB,MF, FLOODED, VRLA, SLA, WET, etc.)

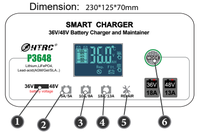
Charging Current: Max 18A(36V),Max 13A(48V)

Type of Batteries: 36V,48V

Minimum Start Volt: 26V

Net weight: 1000g

Dimension: 230*125*70mm



1. Voltage selection switch. Choose the voltage according to the battery voltage, choose 36V for 36V batteries, and choose 48V for 48V batteries.
2. Charge current level. 5A charging current for 36V and 48V batteries.
3. Charge current level. 10A for 36V battery, 8A for 48V battery.
4. Charge current level. 18A for 36V battery, 13A for 48V battery.
5. For activation and repair of weak, old and idle batteries. Can not repair severely damaged batteries. Not for Lithium and LiFePO4 batteries.
6. Used to select a mode

Note :

1. Don not charge for the lithium battery without battery protection board(BMS).

2. Charge the battery below 20AH with the minimum current.

How to charge the battery?

Step 1 Connect the charger to the AC power **AC:100-240V 50~60Hz**

Step 2 36V / 48V — Choose the appropriate gear according to your battery voltage. (Left: 36V, Right: 48V)

Step 3 MODE — Choose an appropriate charging current.

Step 4 Connect the charger and battery.

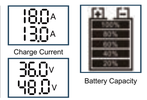
Estimated Charging Time For Different Battery Capacities.

Battery Capacity (Ah)	Charging Time(H)					
	36V 5A	36V 10A	36V 18A	48V 5A	48V 8A	48V 13A
50(Ah)	6.5 H	3.1 H	/	6.5 H	4 H	/
120(Ah)	15 H	7.2 H	4.1H	15 H	9.3 H	5.7 H
150(Ah)	19 H	9.5 H	5.5 H	19 H	12 H	7.5 H
200(Ah)	25 H	12.5 H	7 H	25 H	15.5 H	9.5 H
400(Ah)	/	25 H	14 H	/	31 H	19.5 H
1000(Ah)	/	/	42 H	/	/	58 H

The estimated charging time is for reference only, please refer to the actual time.

Screen Icon Description





Charge Current

Charge Voltage

Battery Capacity



Standby



Repair process ended



Low Voltage



Battery Full



Charger inside Temperature



Battery Real-time Voltage



Repair Mode. An advanced battery recovery mode for repairing old, idle, damaged, stratified and sulfated batteries. The maximum repair time is 24 hours. Not for Lithium and LiFePO4 batteries. Can not repair badly damaged batteries.

Repair Mode



Wrong polarity, please change the connection of the clamps.

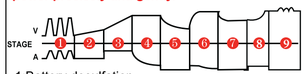


Defect battery, please let the battery be checked by a mechanic and if necessary change the battery.



Bad connection, please check the connection between the charger and the battery.

9-stage charging process optimizing battery power precisely and gently.



1:Battery desulfation
2:Soft start charging
3:Bulk charging
4:Absorption charging
5:Trickle charge
6:Battery test
7:Recondition charging
8:Float & maintenance charging
9:Small current to maintain charging

Features

1. Supports Lithium,Lead-acid(AGM,GEL,SLA,Flooded,WET,EFB,etc.) and LiFePo4 battery.
2. Fully automatic microprocessor control. 9-stage charging program provides the best and most efficient battery charging.
3. Charging voltage automatically adapts to temperature to prevent over-or under-charging.
4. With repair function to repair old, weak and idle batteries.
5. With overcharge protection, reverse polarity protection, short circuit protection, sparks free contact, etc.
6. With LCD screen showing voltage, current, battery power,temperature etc.
7. Charge current can be selected.
8. The charger has auto-memory function and will return to the last mode when connected.

WARNING

1. Don not charge for the lithium battery without battery protection board(BMS).
2. Charge the battery below 20AH with the minimum current.
3. The charger is designed for 36V and 48V Lithium,Lead-acid, LiFePO4 batteries.
4. Check battery specifications before using.
5. Provide ventilation to prevent flames and sparks.
6. Do not expose charger to the sun, or under high temperature environment.
7. Battery acid is corrosive. Rinse immediately with water if acid comes into contact with skin or eyes.
8. Do not charge a frozen or damaged battery.
9. Do not charge non-rechargeable batteries.
10. Do not place the charger on the battery while charging.
11. Be extra cautious to reduce risk of dropping a metal tool on the battery. It might spark or short-circuit battery or other electrical part that may cause explosion.
12. When working with a lead-acid battery, remove personal metalitems such as rings, bracelets, necklaces, watch...
13. Do not smoke or allow a spark or flame while charging.
14. In order to reduce risk of electric shock, unplug charger from AC outlet before doing any maintenance or cleaning .
15. Not intended for children and anyone unable to follow the user manual.
16. Do not over-charge your battery even it is kept connecting in any mode.

Full Voltage of Different Batteries

Battery type	Voltage of fully charged
36V LITHIUM Battery	Max 44.1V
48V LITHIUM Battery	Max 58.8V
36V PB,Lead-acid Battery(AGM, GEL,SLA, Flooded,WET, EFB,etc,)	Max 44.1V
48V PB, Lead-acid Battery(AGM, GEL,SLA, Flooded,WET, EFB,etc,)	Max 58.8V
36V LiFePO4 Battery	Max 43.8V
48V LiFePO4 Battery	Max 58.4V

Made in China

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