

HTRC[®] INSTRUCTION MANUAL

H150AC/DC DUO

AC/DC INPUT
PROFESSIONAL BALANCE CHARGER/DISCHARGER



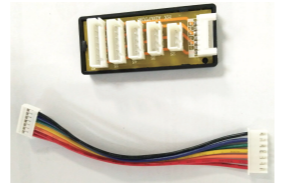
www.ht-rc.com

FC CE RoHS
Made in China

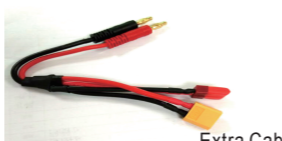
SPECIFICATION

H150AC/DC DUO	
AC INPUT	100-240V
DC INPUT	11-28V
Display	1602 LCD Screen
Batteries	LiPo,LiIco,LiFe,LiHV 1-6 cellsx2
	NiCd,NiMH 1-15 cells x2
	Pb(Lead Acid) 2-20V x2
	Smart Battery I/II/III
Charge Power	150Wx2
Charge Current	0.1-12Ax2
Discharge Power	20Wx2
Discharge Current	0.1-5Ax2
Balancing current	500mA/cell
USB Output	—
Sub Function	Digital Power, Balancer, IR Test
Languages	English
Ext.Temp socket	Futaba 3P socket
Memory	20 memories
Dimensions	L195*W143*H70mm
Weight	1072g


Accessories




Adapter Board 2SET



Extra Cable x2pcs



Extra Cable x1pcs



AC Cord x1pcs (apolegamic)

BATTERIES INFO and MAX CHARGE CURRENT

Battery Type	Cells	Voltage(V)	Charge Current(A)
LiHV	1	3.8	0.1-12Ax2
	2	7.6	0.1-12Ax2
	3	11.4	0.1-12Ax2
	4	15.2	0.1-12Ax2
	5	19.0	0.1-12Ax2
	6	22.8	0.1-12Ax2
Lipo	1	3.7	0.1-12Ax2
	2	7.4	0.1-12Ax2
	3	11.1	0.1-12Ax2
	4	14.8	0.1-12Ax2
	5	18.5	0.1-12Ax2
	6	22.2	0.1-12Ax2
LiIo	1	3.6	0.1-12Ax2
	2	7.2	0.1-12Ax2
	3	10.8	0.1-12Ax2
	4	14.4	0.1-12Ax2
	5	18	0.1-12Ax2
	6	21.6	0.1-12Ax2
LiFe	1	3.3	0.1-12Ax2
	2	6.6	0.1-12Ax2
	3	9.9	0.1-12Ax2
	4	13.2	0.1-12Ax2
	5	16.5	0.1-12Ax2
	6	19.8	0.1-12Ax2
NiMH/NiCd	1	1.2	0.1-12Ax2
	2	2.4	0.1-12Ax2
	3	3.6	0.1-12Ax2
	4	4.8	0.1-12Ax2
	5	6	0.1-12Ax2
	6	7.2	0.1-12Ax2
	7	8.4	0.1-12Ax2
	8	9.6	0.1-12Ax2
NiMH/NiCd	9	10.8	0.1-12Ax2
	10	12	0.1-12Ax2
	11	13.2	0.1-12Ax2
	12	14.4	0.1-12Ax2
	13	15.6	0.1-12Ax2
	14	16.8	0.1-12Ax2
Pb	1	2	0.1-12Ax2
	2	4	0.1-12Ax2
	3	6	0.1-12Ax2
	4	8	0.1-12Ax2
	5	10	0.1-12Ax2
	6	12	0.1-12Ax2
	7	14	0.1-12Ax2
	8	16	0.1-12Ax2
	9	18	0.1-12Ax2
	10	20	0.1-12Ax2
	11	22.0	0.1-12Ax2
	12	24.0	0.1-12Ax2
Lipo	Voltage Level: 3.7V/cell Max Charge Voltage:4.2V/Cell Discharge Voltage Cut off Level: 3.0V/cell or Higher		
LiIo	Voltage Level: 3.6V/cell Max Charge Voltage: 4.1V/Cell Discharge Voltage Cut off Level: 3.0V/cell or Higher		
LiFe	Voltage Level: 3.3V/cell Max Charge Voltage: 3.8V/Cell Discharge Voltage Cut off Level: 2.0V/cell or Higher		
LiHV	Voltage Level: 3.8V/cell Max Charge Voltage: 4.35V/Cell Discharge Voltage Cut off Level: 3.2V/cell or Higher		
NiMH/NiCd	Voltage Level: 1.2V/cell Max Charge Voltage: 1.6V/Cell Discharge Voltage Cut off Level: 0.80V/cell or Higher		
Pb	Voltage Level: 2.0V/cell Max Charge Voltage:2.45V/Cell Discharge Voltage Cut off Level: 1.50V/cell or Higher		

PROGRAM of LiPo/LiIo/LiFe/LiHV

Press +/- to shift the work modes between the battery and the charger. Press ENTER to select Press STOP to quit

LiPo BALANCE CHG 12.0A 22.2V(6S) AUTO

LiPo CHARGE 12.0A 22.2V(6S)

LiPo FAST CHARGE 12.0A 22.2V(6S)

LiPo STORAGE 5.0A 22.2V(6S)

LiPo DISCHARGE 5.0A 22.2V(6S)

BALANCE CHARGE: With this mode, the charger will charge the battery to the termination voltage and balance each cell of the battery pack. Balance port of the battery must be connected.

CHARGE: With this mode, the charger will charge the battery to the termination voltage by CC-CV mode, and stop at 1/10 of setting current.

FAST CHARGE: With this mode, the charger will charge the battery to the termination voltage by CC-CV mode, and stop at 1/5 of setting current.

STORAGE: With this mode, the charger will charge or discharge the battery to the storage voltage. (LiPo: 3.85V/S LiIo: 3.75V/S LiFe: 3.45V/S LiHV:3.90V/S)

DISCHARGE: With this mode, the charger will discharge the battery to the termination voltage.

Select Battery Type/Current/Cell Count after work mode selection. Press +/- button to shift or increase/decrease Press ENTER to select Press STOP to quit

Battery Type: LiPo/LiIo/LiFe Work Mode(selected)

Current: LiPo CHARGE 12.0A 22.2V(6S) Cell Count

The character will blinking during being select

Press ENTER for 2 seconds, the charger will check the battery then enter confirm interface. Press STOP to cancel, press ENTER to start working.

Charger detected Cell Count: R: 6SER S: 6SER CONFIRM(ENTER) CANCEL(STOP)

General Battery type and cell count Alternate Show Work Mode(short form) BAL Balance Charge CHG Charge FAS Fast Charge STO Storage DSC Discharge

Current Battery Voltage: LiPo 5.0A 22.20V CHG 038:38 2998

Timer Capacity

Press ENTER to return STATUS

Press STATUS

Data: Capacity Cut-off ON 8000mAh Safety Timer ON 240Min Ext.Temp Cut-off 80°C Ext.Temp 30°C Input Voltage 12.10V End Voltage 25.20V(6S)

Cell Voltage: Cell1 3700 Cell2 3700 Cell3 3700 Cell4 3700 Cell5 3700 Cell6 3700

Work Finished Show alternated between battery type/cell count with FULL(END)

FULL Li6S 0.5A 25.20V CHG 088:38 4968

Press STATUS: 4200 4198 4202 mV 4198 4202 4200 mV

PROGRAM of Load Memory

Menu Chart: PROGRAM SELECT Load Memory

LS> LiPo BALANCE 12.0A 22.2V(6S)

01> NiMH CYCLE 2.0A 12.0V(10S)

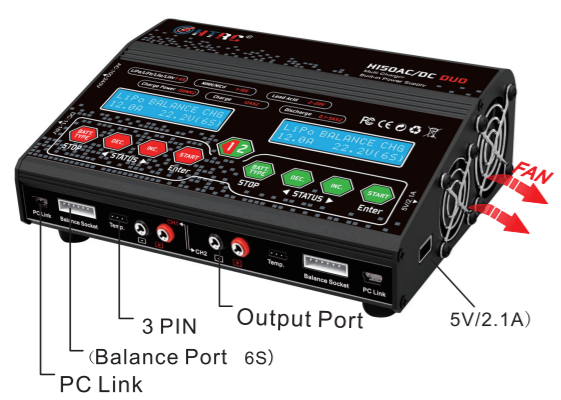
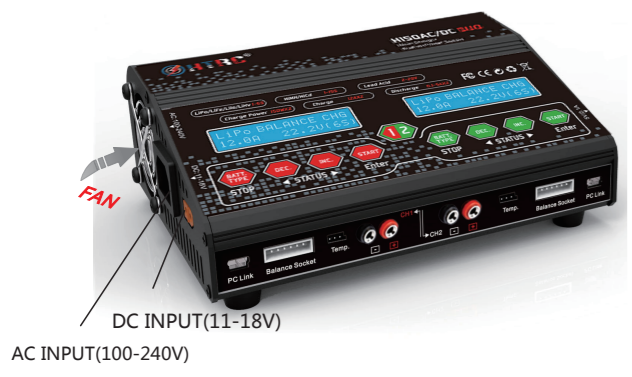
02> Pb CHARGE 7.0A 10.0V(5S)

20> LiFe DCHG 2.0A 9.9V(3S)

There are 20 memories record the work of the charger. LS=latest record. Press +/- to shift the memories, press ENTER to revise, then press ENTER for 2 seconds to start working.

FOREWORD

Thank you for purchasing the HTRC[®] charger. this system is extremely versatile. For the safety and the best use of your system, please read this manual carefully.

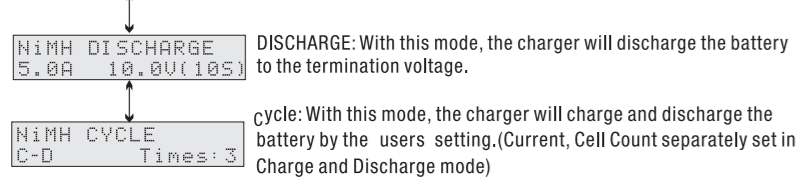


CAUTION and NOTES

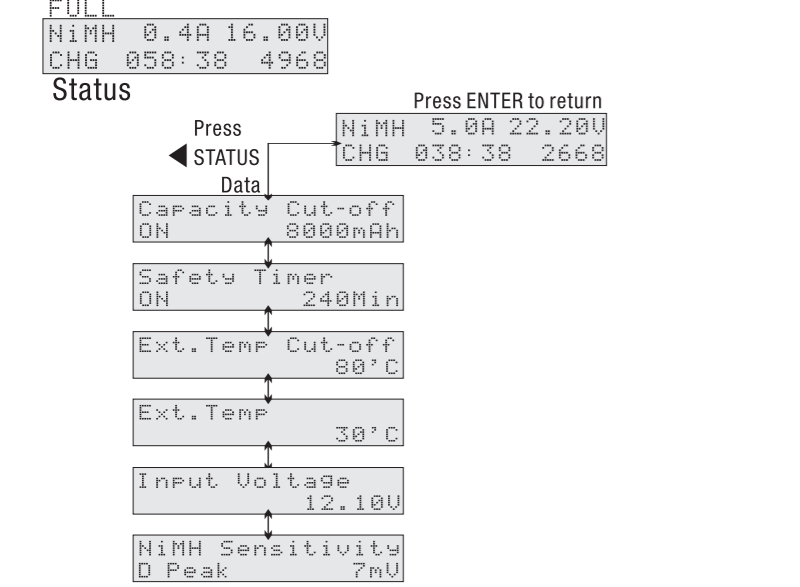
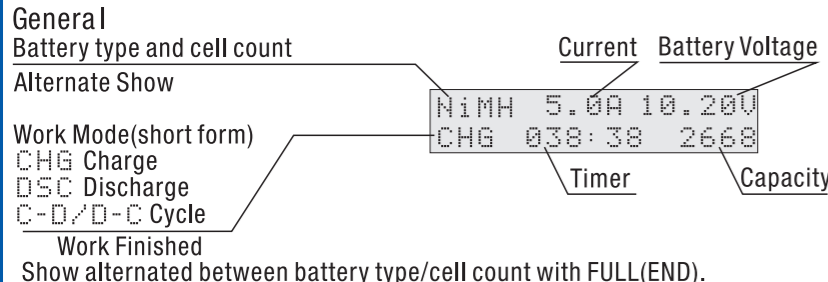
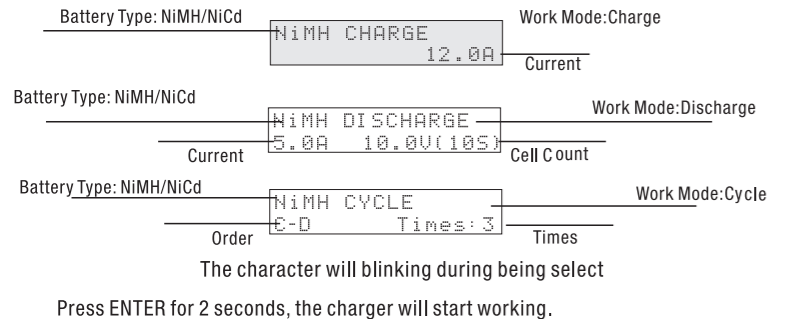
- ⚠ This charger is ONLY suitable for charge rechargeable LiPo, LiIo, LiFe, LiHV, NiCd, NiMH, Smart Battery and Pb batteries. Do not attempt to charge dry cells. Charge other types of batteries may cause fire or explosion.
- ⚠ Set up the Input Power Limit/Low Input VOLT Cutoff correctly in the USER SETTING for the DC power supply.
- ⚠ Pay attention to the charger during use. Do not leave the charger unattended.
- ⚠ Never charge the dead or damaged batteries.
- ⚠ Do not attempt to charge a battery pack containing different types of batteries.
- ⚠ Do not use a too long or damaged cables.
- ⚠ Do not use the charger close by a flammable object. Use only in well-ventilated areas.
- ⚠ Only charge the rechargeable batteries that meet the product specifications of this charger.
- ⚠ Do not allow water, moisture or foreign objects into the charger.
- ⚠ Do not use in humid locations. Do not operate with wet hands.
- ⚠ Do not attempt to disassemble the charger.
- ⚠ Do not use the charger on fleecy materials, such as carpets, blankets, beds and cushions.
- ⚠ Do not block the cooling fan and the air inlet.
- ⚠ Strongly recommend balancing Lithium packs. An unbalanced pack may damage during discharging.
- ⚠ General default charging current is 1C. Read the manual of the battery and setup the suitable current to charge the battery. Higher charge/discharge current will damage the battery, even cause a fire.

PROGRAM of NiMH/NiCd

Press +/- to shift the work modes between the battery and the charger.
Press ENTER to select
Press STOP to quit

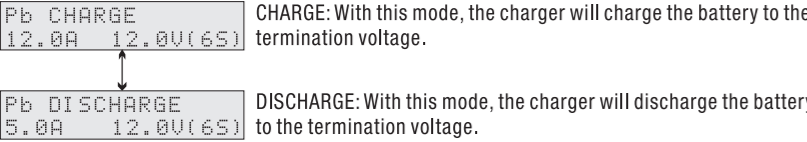


Select Battery Type/Current/Cell Count after work mode selection.
Press +/- button to shift or increase/decrease
Press ENTER to select
Press STOP to quit



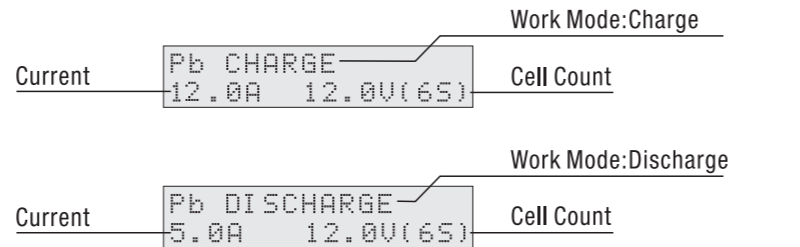
PROGRAM of Pb(Lead-Acid)

Press +/- to shift the work modes between the battery and the charger.
Press ENTER to select
Press STOP to quit

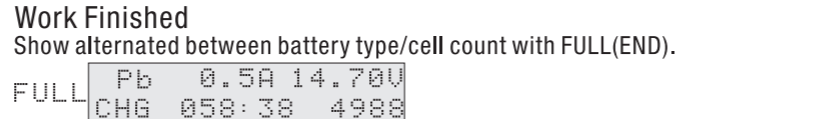
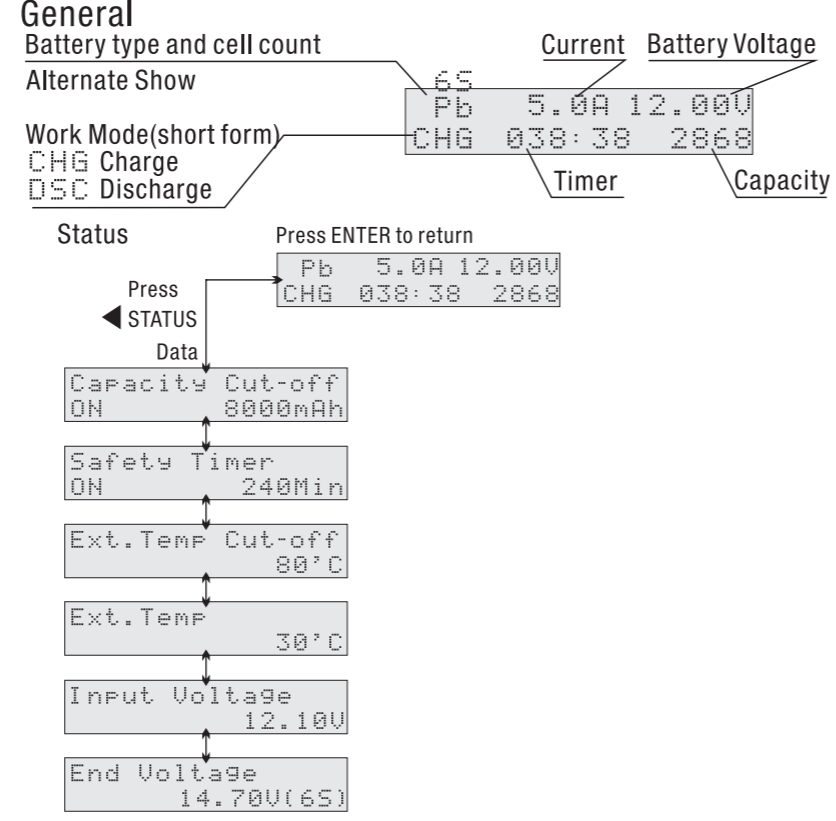


Select Current/Cell Count after work mode selection.
Press +/- button to shift or increase/decrease
Press ENTER to select
Press STOP to quit

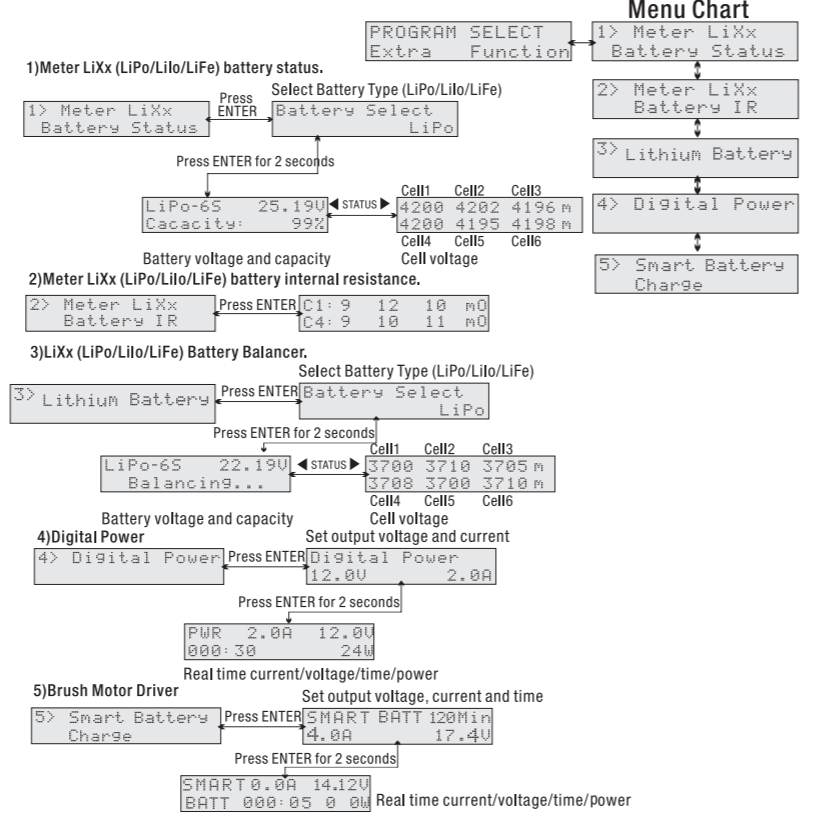
PROGRAM of Pb(Lead-Acid)



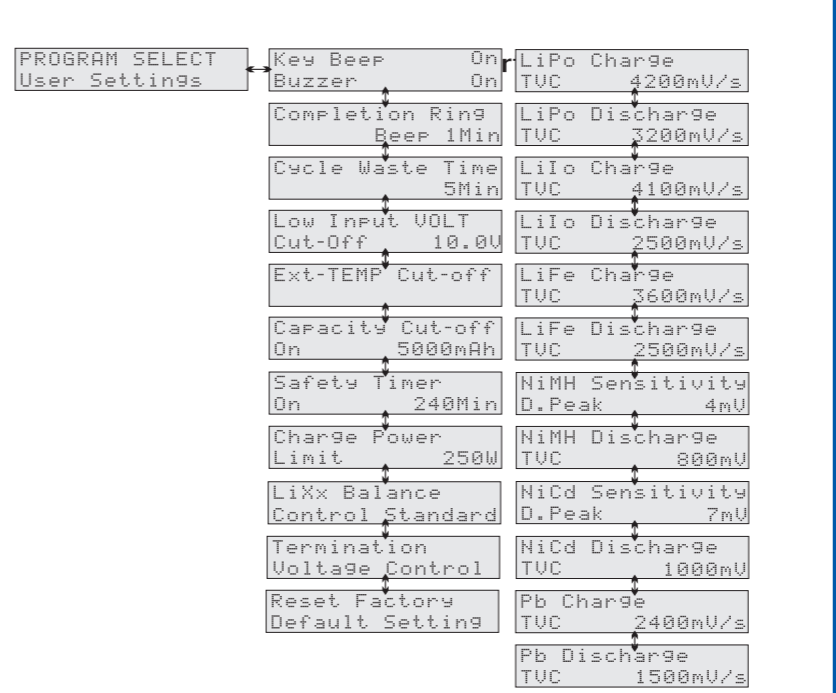
The character will blinking during being select
Press ENTER for 2 seconds, the charger will start working.



PROGRAM of Extra Function



PROGRAM of User Settings



Key Beep Buzzer: In this menu, you can turn on/off of the key sound and set the volume of the buzzer. Key Beep default: On. Buzzer default: Low

Completion Ring: In this menu, you can set the completion ring, 1-5 minutes/off/always optional. Default: 1Min

Cycle Waste Time: In this menu, you can set the waste time between charge and discharge in NiMH/NiCd cycle mo Range from 1-60Min. Default: 5Min

Low Input VOLT Cut-Off: In this menu, you can set the cutoff input voltage of the power supply of the charger to protect you power supply. The charger will cutoff working when input voltage lower than the setting value. Range from 10.0-18.0V. Default: 10.0V

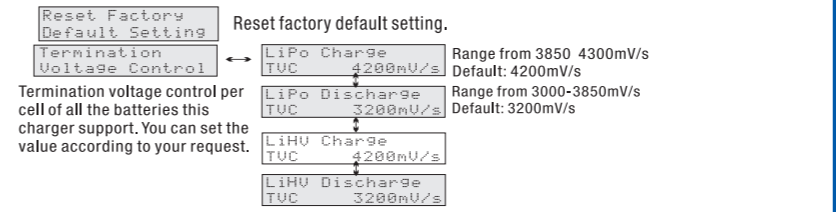
Ext-TEMP Cut-off: In this menu, you can set the cutoff external temperature to protect your battery. The charger will cutoff working when the external temperature is higher than the setting value (a external temperature sensor is needed). On/Off optional, range from 30-90°C, Default: 80°C

Capacity Cut-off: In this menu, you can set the cutoff capacity to protect your battery. The charger will cutoff working when the capacity is more than the setting value. On/Off optional range from 100-6000mAh. Default: 8000mAh

Safety Timer: In this menu, you can set a safety time to protect your charger and battery. The charger will cutoff working when the safety time is up to the setting value. On/Off optional, range from 10-720 minutes, Default: 240 minutes

Charge Power Limit: In this menu, you can set the charge power limit to meet your power supply. The charge will work under the setting value. Range from 10-150 watt, Default: 150 watt

LiXx Balance Control Standard: Balance control of LiPo/LiIo/LiFe, you can set the balance control to meet your demand. Default: Standard
*Fast: Balance speed fastest, less accurate.
*Accurate: Balance speed lowest, more accurate.
*Standard: balance speed and accurateness between Fast and Accurate



ERROR INFORMATION

INPUT VOLTAGE TOO HIGH	Input voltage is higher than 28V, check the power supply, then restart the charger.
INPUT VOLTAGE TOO LOW	Input voltage is lower than the value of LOW INPUT VOLTAGE CUT-OFF, check the power supply, then restart the charger.
REVERSE POLARITY CHECK	Reverse polarity, check the connection between the charger and the battery, correct the connection, then restart the work.
BATTERY CHECK DISCONNECT	Battery disconnect, check the connection between the charger and the battery, then restart the work.
BATTERY CHECK OVER VOLTAGE	Total voltage of the battery is over the termination voltage control(TVC), check the battery and the TVC setting, then restart.
BATTERY CHECK LOWER VOLTAGE	Total voltage of the battery is lower than the termination voltage control(TVC), check the battery and the TVC setting, then restart.
BATTERY CHECK CELL COUNT ERROR	Cell count detected by the charge is different from the setting, check the battery cell count and reset the cell count of the work.
BATTERY CHECK OVER CELL VOLT	Cell voltage of the battery pack is over the termination voltage control(TVC), check the battery and the TVC setting, then restart.
BATTERY CHECK LOWER CELL VOLT	Cell voltage of the battery pack is lower the termination voltage control(TVC), check the battery and the TVC setting, then restart.
BATTERY CHECK FULL BATTERY	Full battery, no need to charge.
OVER Ext. TEMP CUTOFF	External temperature is higher than the setting value, cutoff.
OVER CAPACITY CUTOFF	Capacity is over than the setting value, cutoff.
SAFETY TIME OUT CUTOFF	Time is up to the setting value of Safety Timer, cutoff.

SUPPORT and SERVICES

SOFTWARE FIRMWARE UPGRADE
Please visit our website www.ht-rc.com, to stay up to date with the latest software and firmware for our product in your hand.

WARRANTY
SHENZHEN HUITUO provide a period of one year product warranty from the date of purchase. The warranty only applies to material or operational defects, which are present at the time of purchase. During that period we will repair or replace free of service, charge for products deemed defective due to those causes. This warranty is not valid for any damage or subsequent damage arising as a result of misuse, modification or as a result of failure to observe the use guideline in this manual.

LIABILITY EXCLUSION
This charger is designed and approved exclusively for charge the types of battery stated in this manual. SHENZHEN HUITUO do not accept any liability if the charger is used for any purpose other than that stated. We are unable to ensure you follow the instructions come with the charger, and we have no control over the methods you employ for using, operating and maintaining this device. For this reason we are obliged to deny the liability for loss, damage or costs which are incurred due to the incompetent or incorrect use and operation of this product, or which are connected with such operation in any way. Unless otherwise prescribed by law, our obligation to pay compensation, regardless of the legal argument employed, is limited to the invoice value of those products which were immediately and directly involved in the event in which the damage occurred

TEL: +86-755-81723747
E-mail: John@ht-rc.com
Add: 3rd Floor, NO.2 Building, Gangzai Industrial Park, Furong Industrial Area, ShaJing, BaoAn, Shenzhen, China
www.ht-rc.com