HELTEC HT-ED10AC8V20 Charge and Discharge Tester User Manual

Chengdu Heltec Energy Technology Co.,Ltd
HT-ED10AC8V20
Charge and Discharge Tester
User Manual
Heltec Energy

Contents

Applicability and function

- Applicable batteries: lead-acid batteries, ternary batteries, lithium iron phosphate, lithium manganese oxide, hybrid vehicle nickel-metal hydride batteries.
- Function: All batteries on the market can be used within the voltage range, and can be charged and discharged, balanced voltage, and detect capacity. It also has a real-time battery temperature detection function to prevent the battery temperature from being too high.

Production Parameters:

Input power:	AC200V-245V@50HZ/60HZ 10A.
Input power:	standby power 80W; full load power 2400W.
Allowable temperature and humidity:	ambient temperature <35 degrees humidity: <90%.
Number of channels	8 channels
Inter-channel voltage resistance:	AC1000V/2min without abnormality.

Parameters of each channel:

Maximum output voltage:	20V	Minimum output voltage:	1V
Maximum charge current:	10A	Maximum discharge current:	10A
Measurement voltage accuracy:	±0.02V	Measurement current accuracy:	±0.02A

The host computer software is suitable for computer systems and configurations:

Windows 7 or above (the machine and computer are connected directly via a network cable)

Notes before use

- Please maintain the ambient temperature and humidity when using the device.
- The air inlet at the rear of the device cannot be blocked and a ventilation space of more than 5CM must be ensured.
- The air outlets on the left and right sides of the device must be kept unobstructed and a ventilation space ofmore than 5CM must be ensured; there is an air inlet on the top of the device, and the bottom air inlet must be kept unobstructed and not blocked by debris.

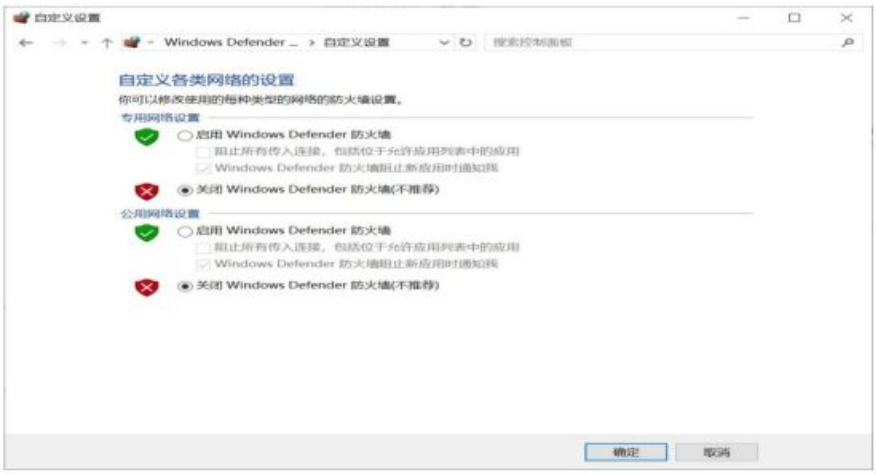
Picture of the back of the machine

Instructions for use

1. When you receive the machine, there will be a USB flash drive. After plugging the USB flash drive into the computer, open the USB flash drive, click the DT series program, and then click a software similar to

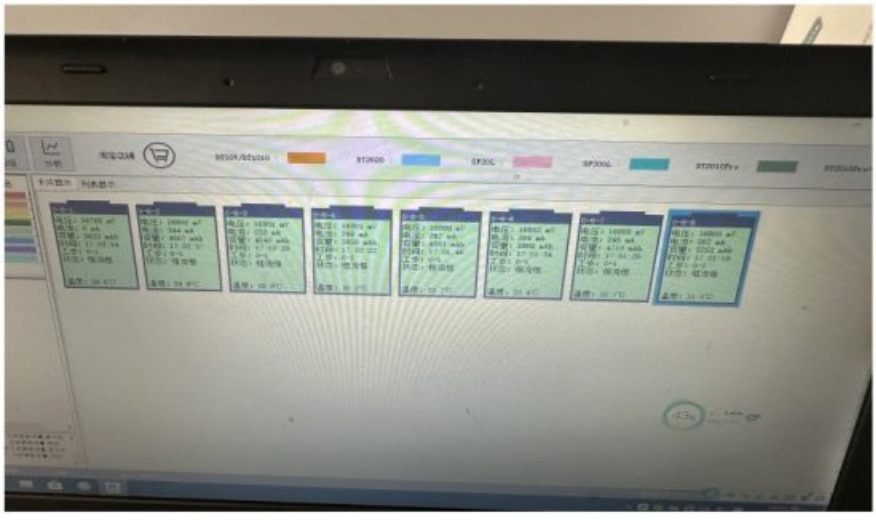
DT_SERIES_4.11.6. Then a window will pop up. Click Browse to install it to the D drive, and then click Next to install it directly.

2. Next, we need to turn off the computer firewall. How to turn off the firewall?
   First, find the computer's control panel, then click System and Security, then click Windows Defender Firewall, then click Enable or Disable Windows Defender Firewall on the left, then click Close on the top and bottom, and finally click OK, as shown in the figure



3. You also need to turn off the computer's sleep time. First, click the lower left corner of the computer to find the computer's settings. Click Settings, click System, and then click Power and Sleep on the left. Change the Screen and Sleep times to Never, as shown in the figure.

4. Now our software will be on the computer (DK is our software). Next, we can click DK to enter the software, click Connect in the upper left corner, and then a window will pop up. The window that pops up will show Offline. Click Offline and then click Connect Device, and then confirm directly. As shown in the figure, it means that the device has been connected.

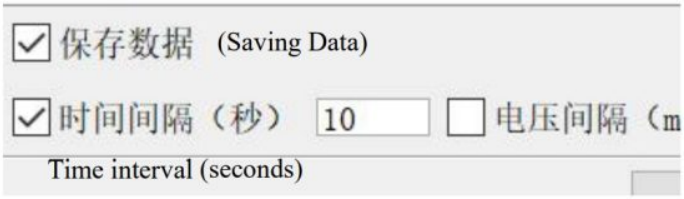


5. Now you can set the charge and discharge parameters. Click the process step in the upper left corner, then select the machine model DT2010pro+ in the upper left corner, then create a new process step plan in the lower right corner, fill in the name and select 1 for the number of parallel connections, then click the name you just created, and then click Add. There are different discharge and charging modes to choose from.

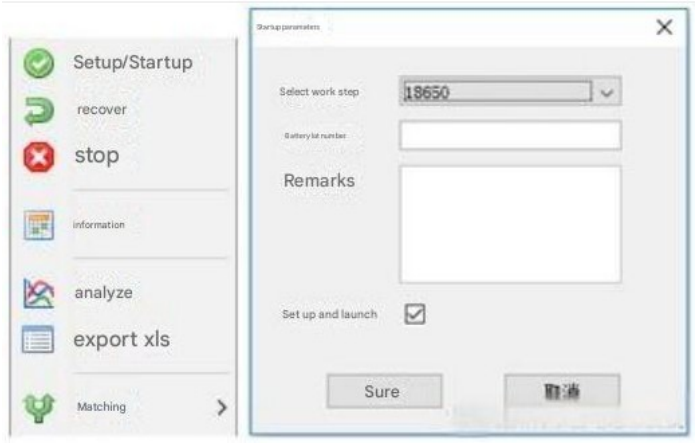
A 6-section blade nickel-metal hydride battery, taking this battery as an example, the charging and discharging parameters are set as follows:

- Step 1: Constant current charging, constant voltage 8400, constant current 1500, voltage hysteresis 50, temperature change rate 20, temperature 40
- Step 2: Leave for 3 minutes
- Step 3: Constant current discharge, constant voltage 5400, current 1500
- Step 4: Leave for 3 minutes
- Step 5: Constant current charging, constant voltage 7200, current 1500, voltage hysteresis 50, temperature change rate 20, battery temperature 40.

After setting, save it, check the save data in the lower left corner, and check the time interval (fill in 10 for the time interval), as shown in the figure.



Machine start: Right click the mouse, set/start is the option to select and start the step.
Before all channels are officially running, you must ensure that there are steps you need to run in the step settings. Set the start, you can click to select the step, and select the step name you set.



After selecting the finishing step, click OK, and the machine will automatically run according to your settings.
If the clamp is clamped upside down, it's okay. The computer will show that negative voltage is not allowed to start. You can clamp it again. Black is negative and red is positive.
You can click a channel to start it separately, or you can press Ctrl and then press A to select all so that they can start together.
Similarly, you can click a channel to analyze it by right-clicking it, or you can press Ctrl and then press A to select all channels to analyze it by right-clicking them.

www.heltec-energy.com

Documents / Resources

	HELTEC HT-ED10AC8V20 Charge and Discharge Tester [pdf] User Manual HT-ED10AC8V20 Charge and Discharge Tester, HT-ED10AC8V20, Charge and Discharge Tester, Discharge Tester, Tester

References

- Heltec Energy - Battery Energy Storage and Power Management Solutions Provider with BMS, Active Balancer and Battery Spot Welder
- User Manual