



# **2-24S Intelligent Automatic Equalizer**

## **Instruction Manual**

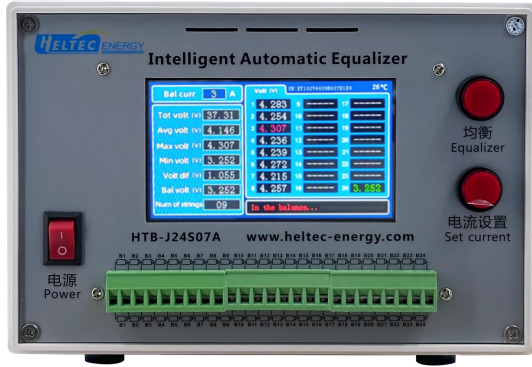
**Heltec Energy**

**( HTB-J24S04A / HTB-J24S07A )**

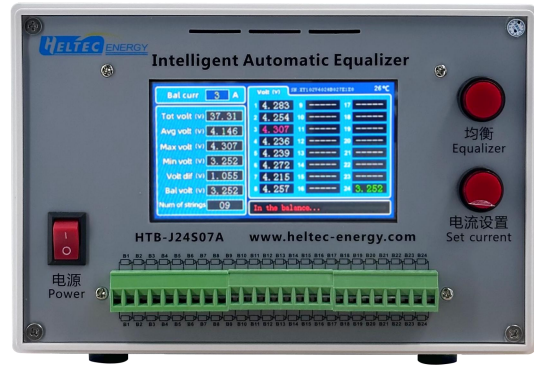
## 1. Product Parameters

Technical Index	2~24S 3/4A Intelligent Battery Equalization Instrument	2~24S 1-7A Intelligent Battery Equalization Instrument
Model SKU	HTB-J24S04A	HTB-J24S07A
Picture		
Applicable Battery Strings	2-24S	
Support battery type	NCM/LFP/LTO/ Nominal voltage between 2V and 4.5V	
Maximum / Minimum Measuring Voltage	4.5V/2V	
Max Balancing Current	3A for lifepo4 / 4A for ternary	7A
Balancing Type	Discharge balancing	
Single string input interface withstand voltage	-100V~+100V	
external power supply	12V 5A	

## 2. Product Appearance



HTB-J24S04A



HTB-J24S07A

### Intelligent Automatic Equalizer



HTB-J24S04A



HTB-J24S07A



HTB-J24S04A



HTB-J24S07A

### 3. Product Dimension



**HTB-J24S04A**

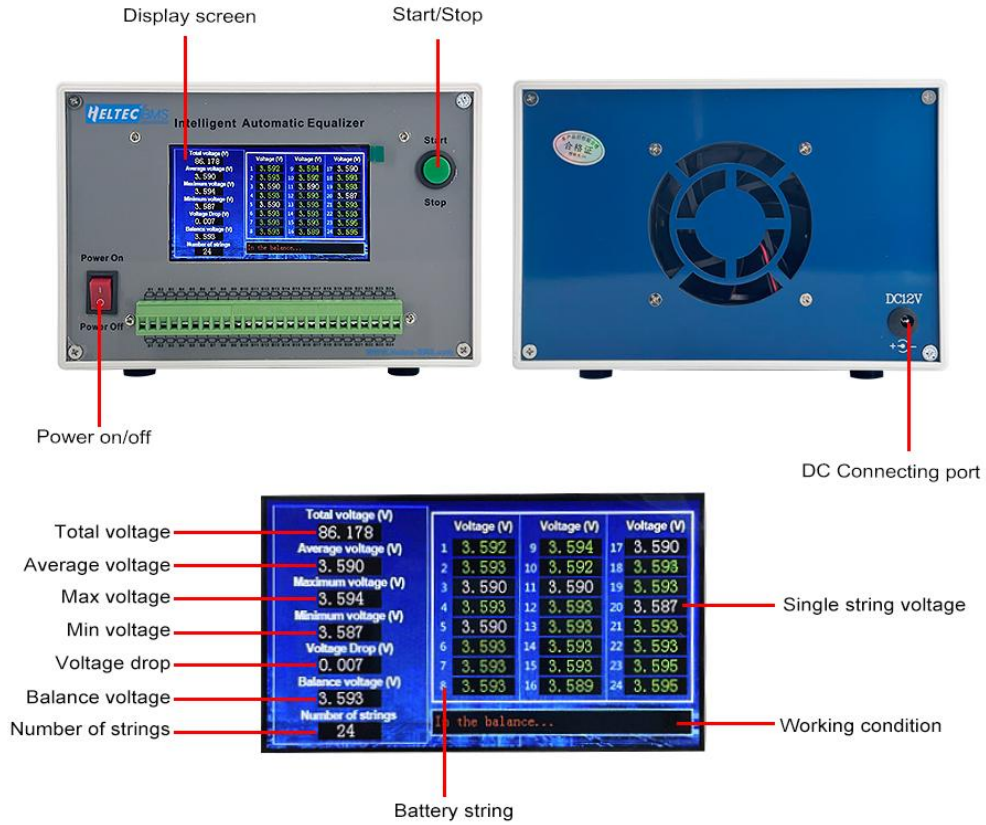


**HTB-J24S07A**

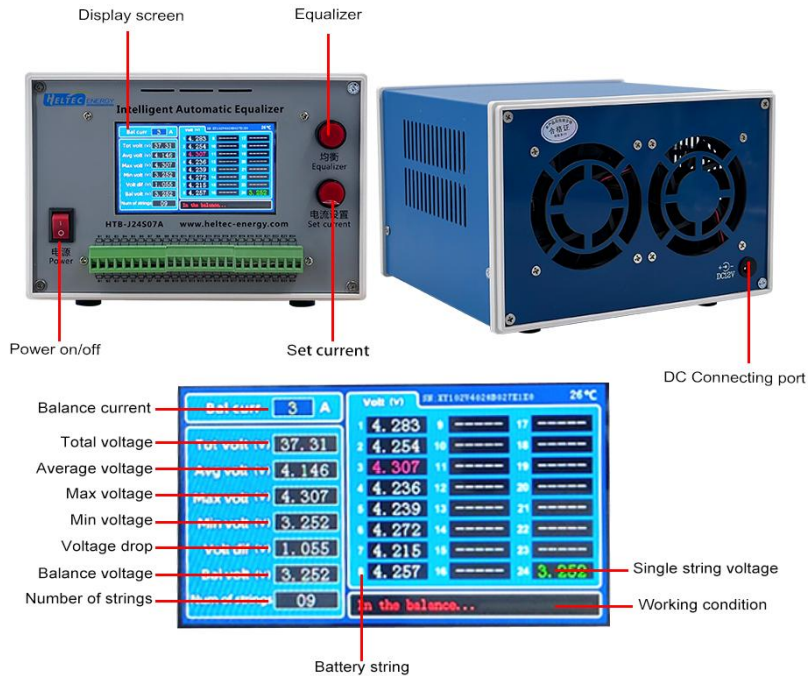
\*Note: Please refer to the actual size. There is a slight error in manual measurement.

### 4. Display Content

- Voltage of each cells;
- The total voltage;
- The average voltage;
- The maximum voltage;
- The minimum voltage;
- The maximum voltage difference;
- The balanced voltage;
- Number of strings of the battery pack cells.



### HTB-J24S04A



### HTB-J24S07A

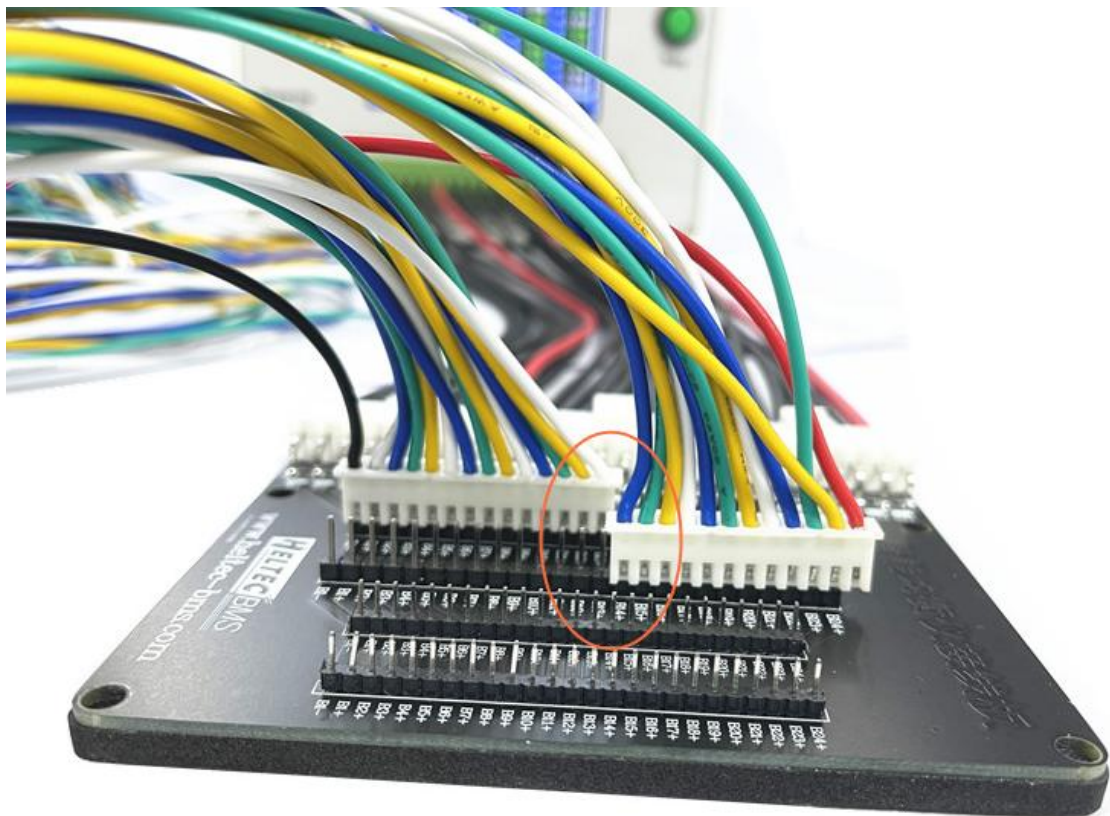


## 5. Operation Steps

- 1.Power on the instrument.
- 2.Wire the batteries according to the sequence of markings on the instrument or wiring board.
- 3.Check if the voltage and cell numbers displayed on the screen are correct. If not, check the wiring and battery again.
- 4.Start the equalization and check if the balance voltage is correct. After the equalization is completed, the instrument will automatically stop.

**\*Note:**

The wiring board has markings of sequence on it. Please note that repeated connection of the same pin will form a short circuit and damage the battery and instrument!



## 6. Battery Maintenance Steps

1. There is a faulty battery cell: replace the cell - fully charged - balance - fully charged - battery maintenance is completed.

2. There is no faulty battery cells: fully charged - balance - fully charged - battery maintenance is completed.

3. If one time equalization cannot achieve the desired effect, it can be repeated multiple times for better results.

## 7. Attention

1. Due to the large balancing current, the wires should be thick enough, otherwise it may burn out or cause other problems.

2. B - refers to the negative pole of the battery pack, B1 is the first string from the negative pole, and it is prohibited to connect more batteries during equalization.

3. When balancing, please be careful not to touch the battery with the wires disconnected and do well insulation protection.

4. Please kindly confirm the multiple times before connecting to the instrument.

## 8. Packing List

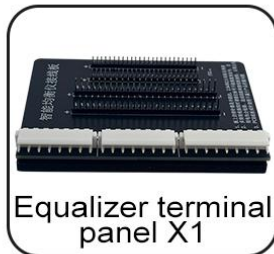




HTB-J24S07A X1



DC adapt X1



Equalizer terminal panel X1



Connecting line X3



specification x1

### HTB-J24S07A

## 9.Warranty Statement:

**One-year warranty with lifetime repairs.** For manual damage or unauthorized dismantling, will not provide warranty and return for replacementService, do not enjoy one-year warranty service. For more details, please contact customer service, our company reserves the right to final interpretation.