

Dyness Tower

# EXPANSION INSTRUCTIONS



## Important:

The installation and all other kinds of works or measurements in combination with the Tower are only allowed by professional and qualified electricians.

This manual is a brief help for battery expansion, and cannot replace the original user manual. Due to the characteristics of lithium iron phosphate batteries, the newly added battery module is not as active as the original system battery module. After performing the following capacity expansion operations, a small-scale SOC jump will occur during subsequent use, which is a normal phenomenon. After using 5 to 10 cycles, SOC jumps occur and can be rebalanced according to the following expansion steps.

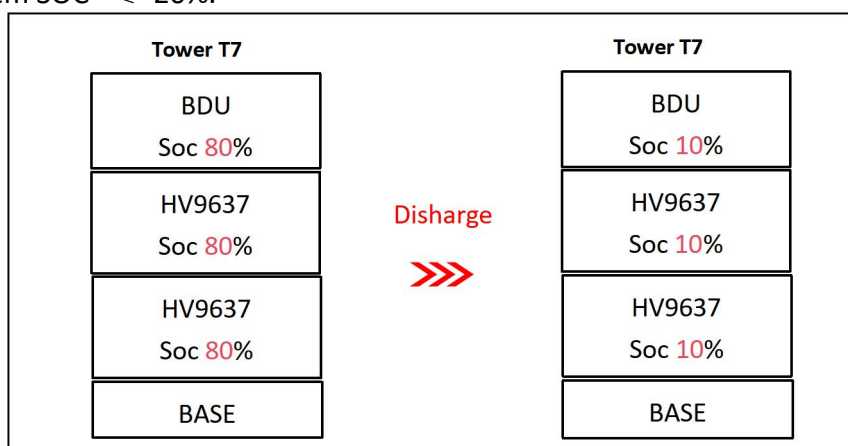
**Note:** High Voltage ! Improper handling can cause danger and damage.

## System Capacity Expansion

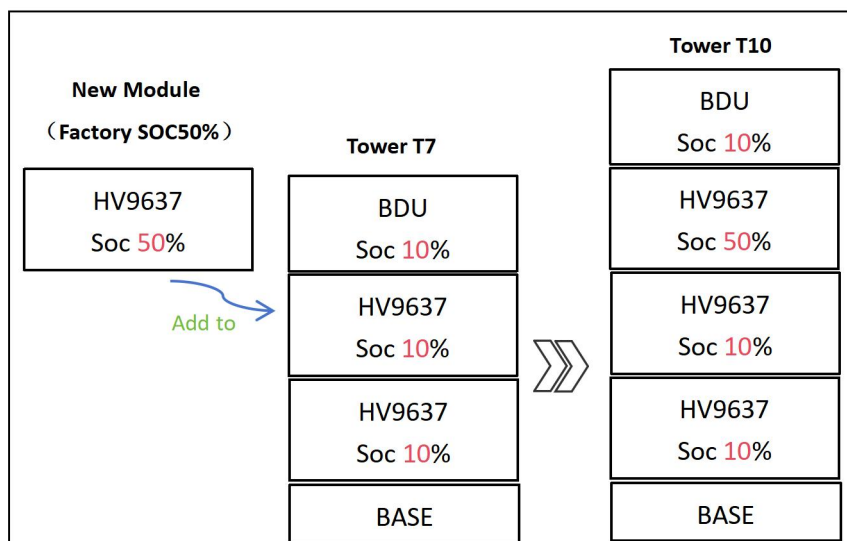
### 1. Using an inverter for module expansion.

Taking the Expansion of Tower T7 to Tower T10 as an Example.

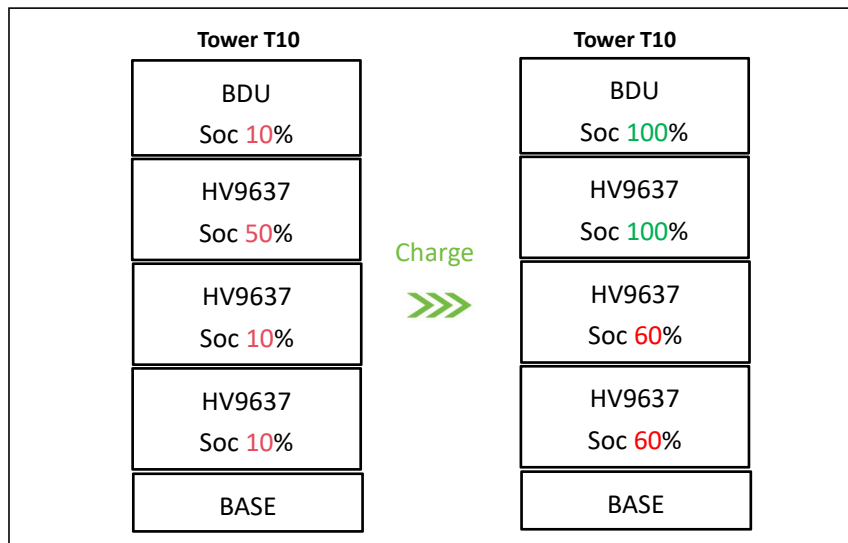
- ◆ Firstly, use an inverter to discharge the original Tower system, ensuring that the system SOC  $\leq 20\%$ .



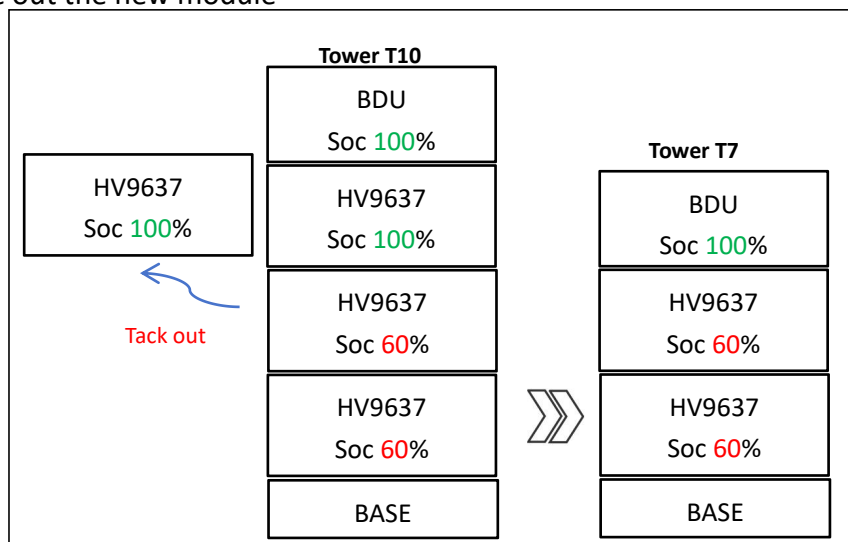
- ◆ Add the battery module to be expanded to the Tower T7 system, making it Tower T10;



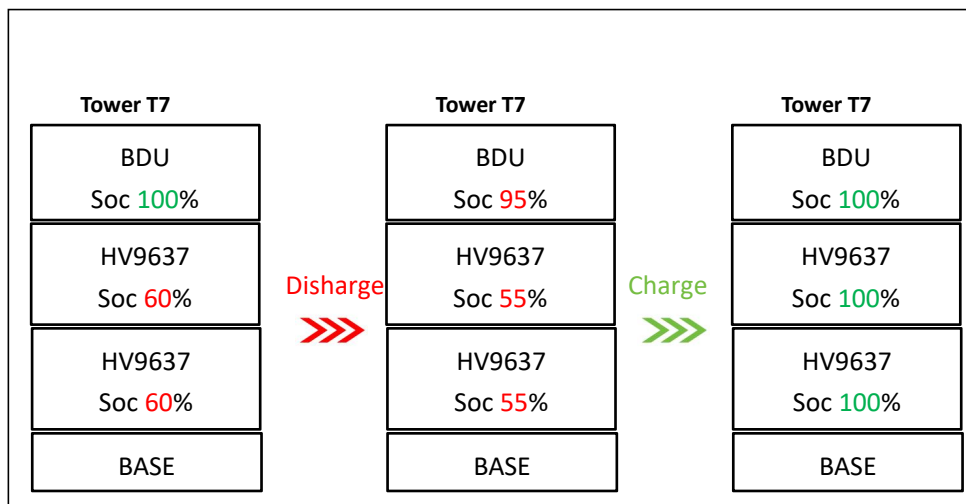
- ◆ Use the inverter to charge the T10 until the SOC is 100% displayed on the inverter, so that both the BDU and the newly added module SOC are 100%.



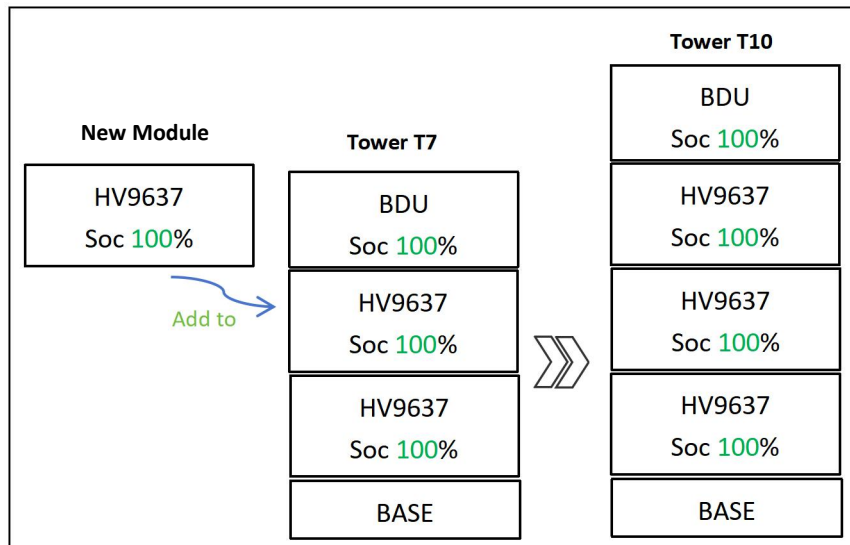
- ◆ Take out the new module



- ◆ Discharge the original system SOC to between 90~99%. Then continue charging until the inverter shows SOC 100%

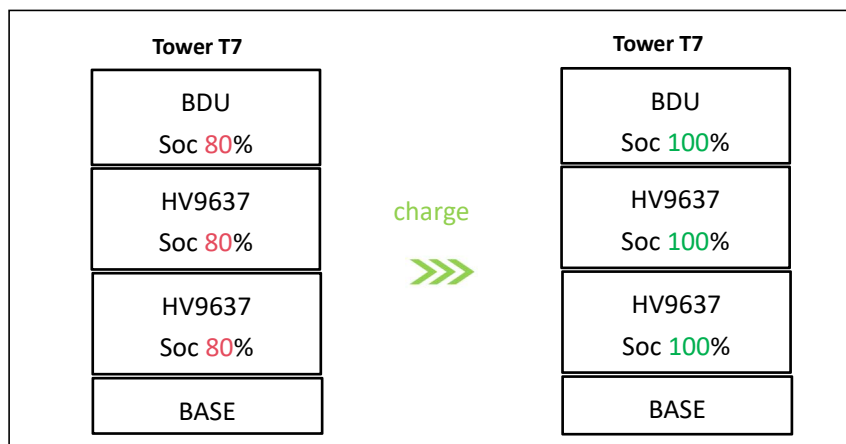


- ◆ Finally, add the new module back into the system, and the expansion is complete.

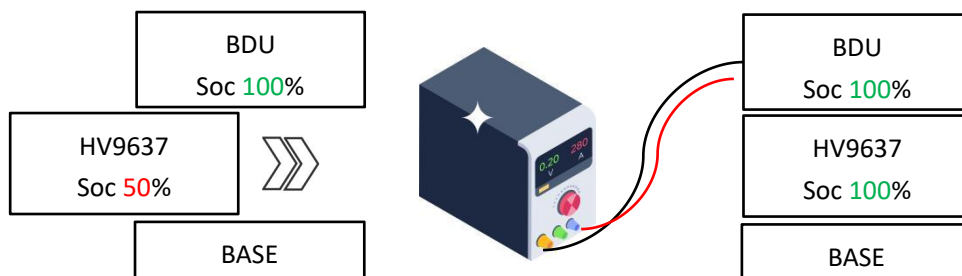


## 2. Use a DC charger for expansion.

- ◆ Firstly, use an inverter to charge the original Tower system, ensuring that the system SOC = 100%.

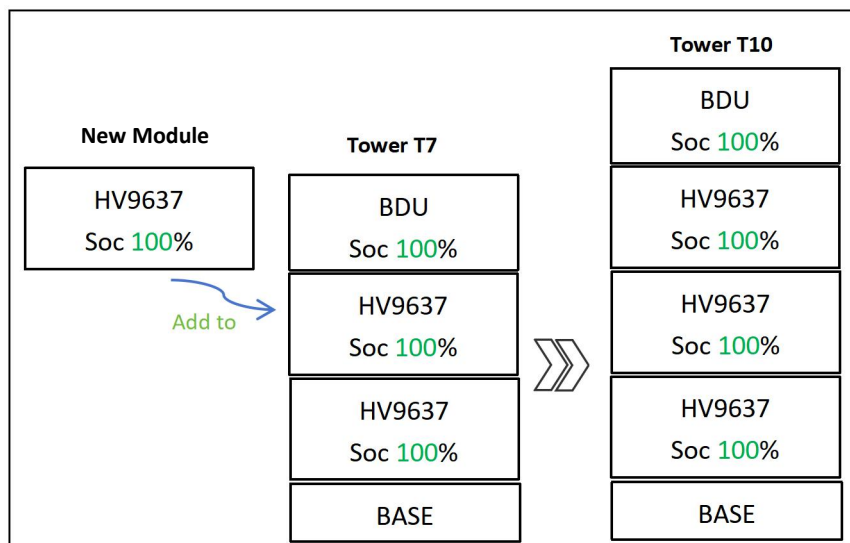


- ◆ Install the new module with the BDU&Base and use a DC charger to charge the new module. There is a sound of relay disconnection in the BDU, or the charging current is 0, indicating that the battery SOC = 100%.



Constant current charging parameter setting: Charging voltage 108V  
Charging current 5A

- ◆ Finally, add the new module back into the system, and the expansion is complete.





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Dyness Digital Energy Technology Co., LTD.

[www.dyness.com](http://www.dyness.com)