

## Application Note No. 014

# Renac Battery Maintenance Solution

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For Turbo H1 Battery

## Version History

- Version 01 (2024-03-22)  
Initial Release

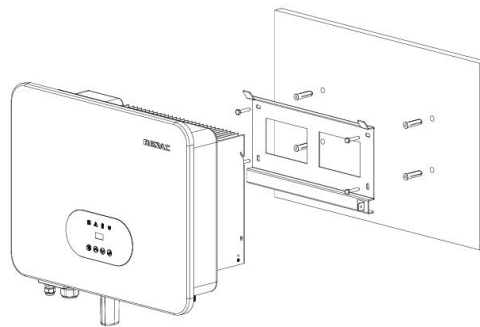
## Why do we need maintenance battery during store time?

When batteries are stored for a long time, they can lose their power due to self-depletion. If you plan to store a battery for more than 6 months, it's important to perform regular charging and discharging maintenance to ensure that the battery remains effective and has a longer life cycle.

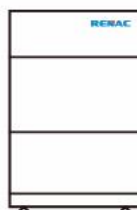
## How to finish maintenance battery charging and discharging?

We suggest utilizing an inverter for both charging and discharging for proper battery maintenance, using the Renac inverter as a reference.

1. Please install inverter on the wall ,please reference N3 / N1 inverter user manual for detail mount process

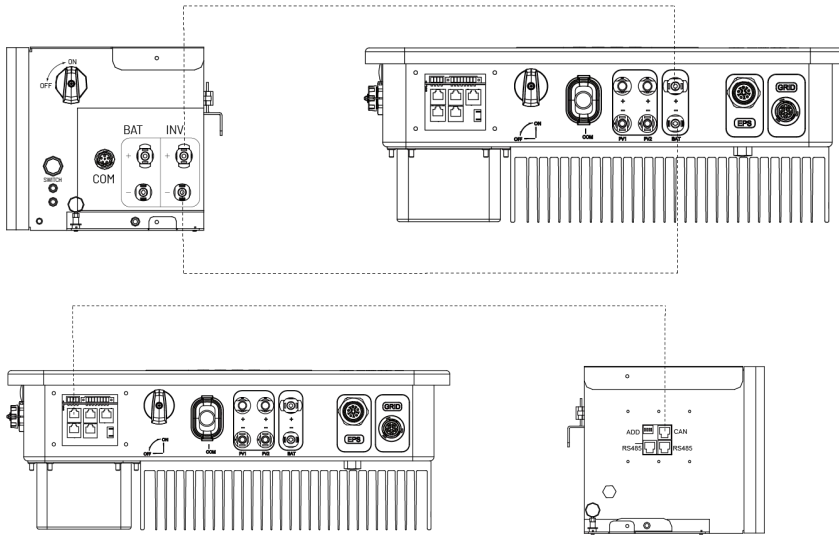


2. Please install 2 batteries and a BMC to form a battery pack. reference H1 battery user manual about battery connection

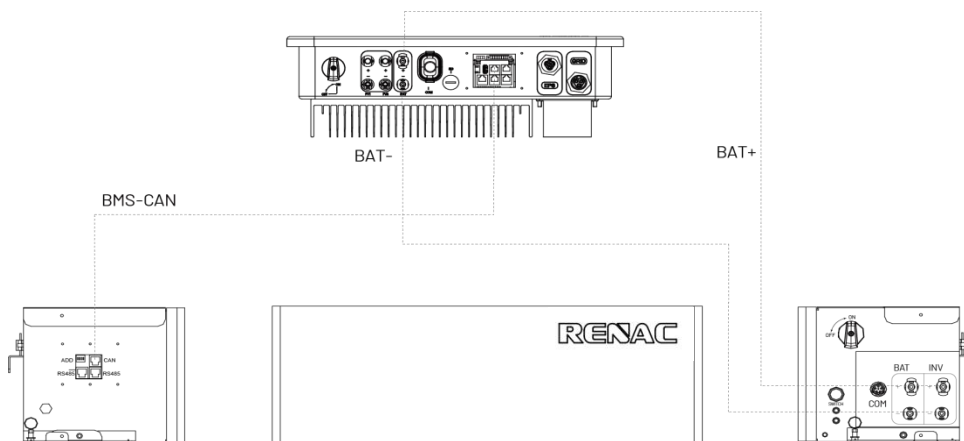


3. Please connection battery BMC to inverter then form an energy storage system

N3 inverter connect to battery



N1 inverter connect to battery



4. Please set the battery DIP switch to match the following configuration for one battery cluster type.

	Master	Slave 1	Slave 2	Slave 3	Slave 4
1 battery cluster	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> E1 NO				
2 battery cluster	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> E1 NO	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> E1 NO			
3 battery cluster	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> E1 NO	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> E1 NO	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> E1 NO		
4 battery cluster	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> E1 NO	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> E1 NO	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> E1 NO	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> E1 NO	
5 battery cluster	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> E1 NO	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> E1 NO	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> E1 NO	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> E1 NO	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> E1 NO

5. In order to ensure that the inverter can work properly, it needs to be connected to the AC grid, if there is a PV, it can be connected, without PV is also possible.
6. Please ensure that the smart meter is connected to the inverter, or else the battery won't be able to discharge.
7. When connect all cable(AC cable, battery cable, smart meter, PV cable, communication cable) then turn on switch and sure inverter is normal situation, battery SOC also shows on inverter interface, set local safety regulation, work mode is self-use, enable smart meter, reference user manual about parameter setting

===Work Mode=== >Self Use  OK	====Safety==== >AS4777  OK	====Feature==== Remote Control DRM0 >Meter Setting
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8. Please ensure that the MAX charge current is set to no more than 15A before turning on the load. Once the load is turned on, the battery will discharge until the SOC reaches 10%.
9. Please switch work mode to "backup" and set the maximum charging current to 15A before charging the battery. Then, charge the battery up to 30%.
10. When SOC value shows 30% meanwhile it is finished maintenance battery charging and discharge process, please turn off inverter and battery.