Dyness battery and Infini Hybrid 5KW PV Inverter Setup

Check List:

Dyness Powerbox F-10.0 Power cable Communication cable Infini Hybrid 5KW PV Inverter

Before start, make sure battery and inverter size match.

Follow Dyness user manual to check details, it is recommended to use battery in 1: 2 configuration.

In our case now, 5kW inverter connects to 10kWh battery.

Step 1 : Cable connect in inverter

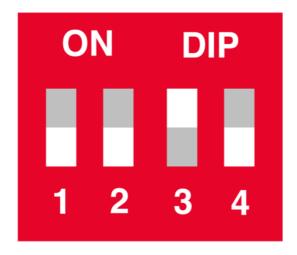
Keep both inverter and battery completely off. Connect power cable and comm cable to inverter first. Note: Comm cable has label on, make sure the inverter side goes to battery side , inverter side to the inverter RS-485 side ,battery side left for later on in battery connection.



Step 2 : Dial DIP switch on master

Make sure master battery is dialed as below method.

OFF OFF ON OFF



Step 3 : Cable connect in battery

Keep battery off, connect power cable and comm cable to battery. When you are installing a Powerbox, there are two scenarios. Single comm port – battery comm cable go in here. Dual comm port – battery comm cable go top interface as shown. When you are installing loose batteries like B4850/B3, battery comm cable goes to master battery "IN" comm port.



Step 4 : Breaker/Fuse between inverter and battery

Connect DC breaker or Fuse between inverter and battery to protect both products.

Step 5 : Power on inverter AC/Grid

Power on inverter to activate inverter, then turn on inverter's switch.



Step 6: Power on battery

Long press 3s power switch on Powerbox to power on battery, when its loose battery like B4850/B3, 3s also on master SW to power on all batteries.



Step 7: Power on DC breaker

Power on DC breaker of Powerbox.



Step 8: Power on DC breaker between battery and inverter.

Powerbox's breaker has been powered on, but power on the DC breaker between inverter and battery again!

If you are installing loose battery like B4850/B3, power on DC breaker between inverter and battery now.

Step 9: Battery and inverter are connected!

Now inverter shows battery PV grid load battery's current on screen. You can see 'OK' on left bottom, it means everything is right.Battery and inverter are connected!



Enter and Down button to check the battery's voltage and soc. For this example, you can see voltage is 50.4V and SOC is 100%. Attention: The blank on the screen means step.





Step 10: Inverter setup

Press ENTER, go in, make sure everything are properly set as below:

1. Loads

(1) If you want connect loads

Steps: Press and hold the 'Enter' button for approximately 1 second when the utility is detected or 3 seconds without the utility.



(2) If you don't want connect loads

Steps: Press and hold the 'ESC' button until the buzzer continuously sounds.



2. Solarpower setup

(1) Open Solarpower, you can see battery's voltage current...



(2) Click parameter setting, then follow red frame change every voltage. But you can change charge \discharge current properly. Password is 'administrator'



| 参数设置 | | | | | | |
|------------|------------|--------------|----------------|---------|-----|----|
| 并网最低电压: | 184 🌲 V | 应用 | 并网无功功率: | 0 | Var | 应用 |
| 并网最高电压: | 264.5 🌲 V | 应用 | 并网最高平均电压: | 253 🗘 | | 应用 |
| 并网最低频率: | 47.48 🌲 Hz | 应用 | 最大并网功率: | 5,000 🔶 | W | 应用 |
| 并网最高频率: | 51.5 🔶 Hz | 应用 | 并网功率因数: | 1 | | 应用 |
| 并网等待时间: | 60 🗧 秒 | 应用 | | | | |
| 最低PV输入电压: | 200 👙 | V <u>应</u> 用 | 浮充电压: | 52 🜲 | | 应用 |
| 最高PV输入电压: | 900 🌲 | V <u></u> 应用 | 有市电时电池放电截止电压: | 45 🌲 | | 应用 |
| 最低MPP电压: | 250 🌲 | V <u>应</u> 用 | 有市电时电池恢复放电电压: | 52 🗘 | | 应用 |
| 最高MPP电压: | 850 🌲 | V 应用 | 无市电时电池放电截止电压: | 45 🔶 | | 应用 |
| 最大充电电流: | 100 🌲 | A 应用 | 无市电时电池恢复放电电压: | 49 🌲 | | 应用 |
| 最大AC充电电流: | 100 🌲 | A 应用 | 电池温度补偿: | 0 🗘 | mV | 应用 |
| 最大充电电压: | 53 🌲 | V 应用 | 并网模式下电池最大放电电流: | 138 🌲 | A | 应用 |
| LCD屏幕保护时间: | 60 🔻 | 秒 应用 | 并网功率校准: | 0 🗘 | w | 应用 |

Step 11: You are ready to go

Step 12: Shut Down POWEBOX

- 1 Remove all the load
- 2 Turn off DC breaker of Powerbox.
- 3 Long press 3s Reset button of the Powerbox to power off battery
- 4 Disconnect PV/Grid
- 5 Turn off the inverter power switch, shut down the inverter

B4850/B3 Parallel

- 1 Remove all the load
- 2 Turn off DC breaker between the battery and inverter.
- 3 Disconnect PV/Grid
- 4 Turn off the inverter power switch, shut down the inverter

5 Long press SW button to power off the battery, from the master to the slaves one by one. Then switch off all the batteries' Power switch