

Dyness and Deye Setup

Check List:

Dyness Powerbox F-10.0

Power cable

Communication cable

Deye SUN-5K-SG01LP1-US 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.

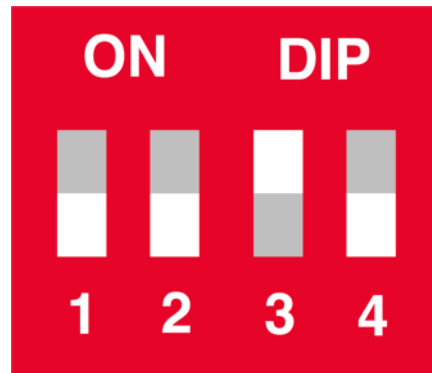
Note: Comm cable has label on, make sure the inverter side goes to battery side, inverter side to the inverter CAN side, battery side left for later on in battery connection.



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

Turn on inverter's switch, then press 'ON' button to power on inverter.



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.

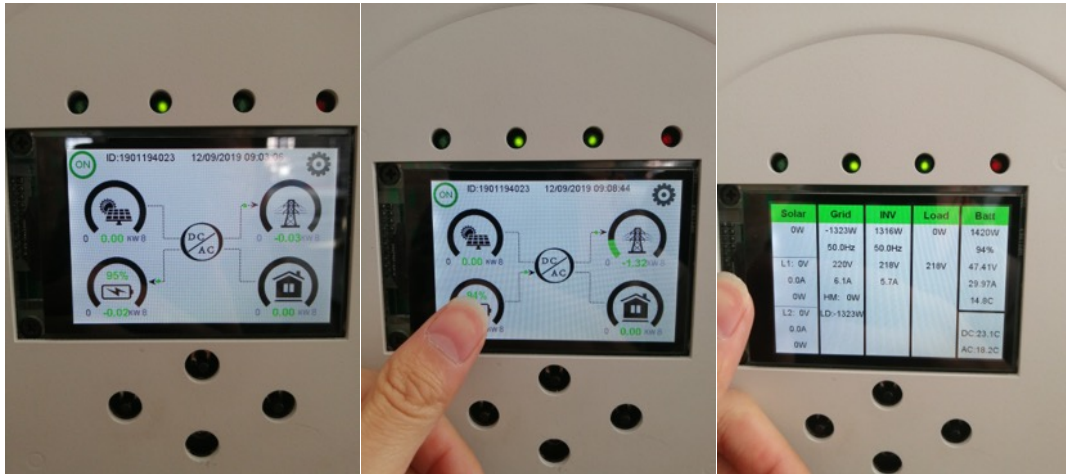
Powerbox's breaker has been powered on, but power on the DC breaker between inverter and battery again!

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 on screen. Green LED is Lighting, No alarm LED means everything is right. Battery and inverter are connected!

Press battery button to check the battery status like voltage current soc etc..



Step 10: Inverter setup

Press setup in the top right corner, go in, make sure everything is properly set as below:

1. LI type(Lithium)

Steps:

Setup →

Battery Setup →

Batt (each 4850/B3 Max charge/discharge current is 25A, N batteries mean $N \times 25A$. then choose 'Use Batt % charge' and 'BMS Lithium Batt') →

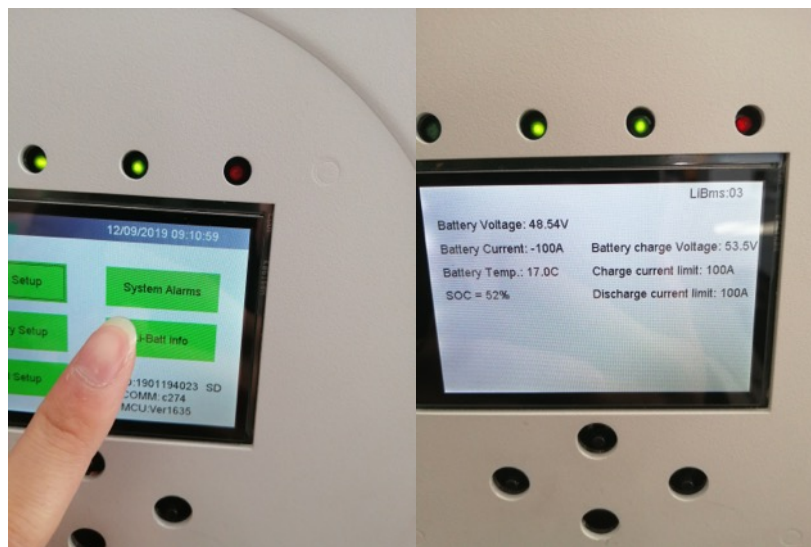
Charge (choose 'Grid Charge', charge current is $N \times 25A$, Float V is 51V, Absorption/Equalization V is 52V) →

Discharge (Shutdown is 15%, Low Batt is 20%)





After setup, you can press 'Li-Batt info' to check battery Voltage/Current/Max Charge/Discharge current/SOC.



2. Grid

Steps:

Setup →

Grid Setup →

Limiter (choose 'Grid Sell')

And 'Time of Use'. you can set proper time on the right and choose it)

Example: set like this picture means 06:00~12:55, battery discharge to Grid until SOC is 20%; 12:55~06:00(tomorrow), Battery charge through Grid until SOC is 100%.



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