EP800

Generator Smart Star Installation

V1.4

BLUETTI

Thank You!

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From the very beginning, BLUETTI has tried to stay true to a sustainable future through green energy storage solutions while delivering an exceptional eco-friendly experience for our homes and our world. That's why BLUETTI makes its presence in 100+ countries and is trusted by millions of customers across the globe.

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If you have any questions or concerns about this manual, please contact BLUETTI support for further assistance.

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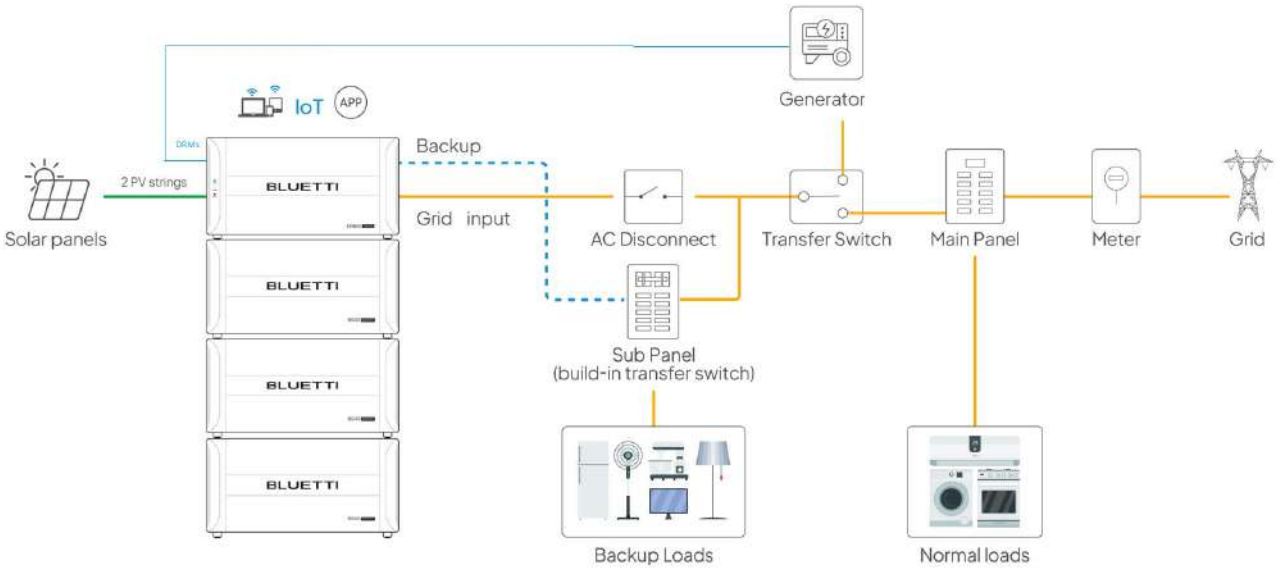
1. Working Principle

Only for generators which the power is more than 5000W, with 120V/240V ,60Hz. not for 120V.

Automatic Start: “Enable Generator” Mode in the BLUETTI app, the Generator automatically starts by receiving the signal through the DRMs/COM communication cable. Without grid power, Generator supplies power to the load and fully charges the system as if in Backup mode. When the grid is restored it switches back to grid power, the Generator stops running and the system supplies power to the loads.

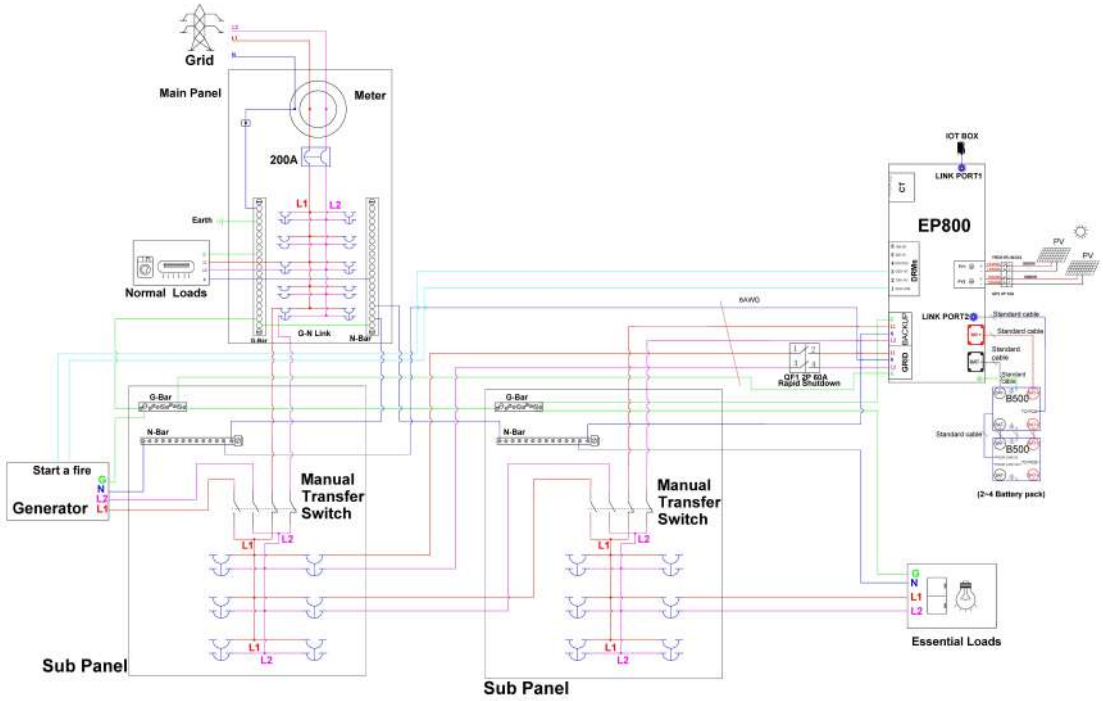
Attention: Deactivate the Generator in the app when returning to grid power.

Don't forget to disable the **“**Enable Generator” Mode in the app when grid restored.



2. Electrical Diagrams

Automatic Start



3.3.4 DRMs Port

The EP800 offers the flexibility to be upgraded for solar energy storage, allowing you to harness more power form the sun. Additionally, it features a DRM interface specifically designed to serve as a convenient ignition reserve port for generators, ensuring a seamless integration of backup power solutions.

Table 3-5

PIN	Category	Definition	Specifications
1	GEN COM	Single-pole & double-throw relay common terminal	External DC input limit: 30VDC / 3A. (For generator input)
2	GEN NC	Single-pole & double-throw relay normally closed output	
3	GEN NO	Single-pole & double-throw relay normally open output	
4	INS GND	Signal ground	/
5	485-A3	A: RS485 differential signal +	Connect to meter A2
6	485-B3	B: RS485 differential signal -	Connect to meter B2

3. Procedures

Step 1: Wiring

Connect the cables according to the electrical diagrams above.
Note: Install a transfer-switch between the grid and the Generator.

Step 2: Power on

Press and hold the battery power button to activate the energy storage system. Refer to the product's user manual and related materials for detailed instructions.

Step 3: Upgrade the firmware

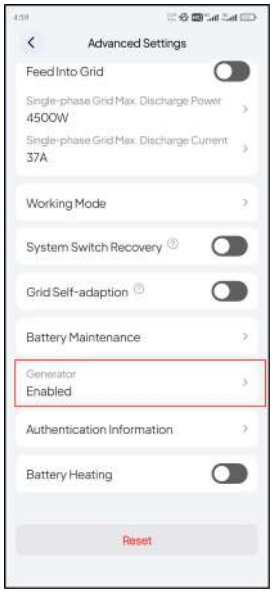
Firstly, please upgrade the firmware of ARM and DSP to the latest version by bluetooth, ARM:502714, DSP:502614, IOT firmware V9043.14 .If you do not know how to do , please read the APP user manual about how to upgrade the firmware.

Step 4: Configure Grid Input

Access the "Advanced Settings" page in the app and set the grid input limits. Be sure to set the power and current below 80% of the Generator's rating. Refer to the product's app user manual for details.

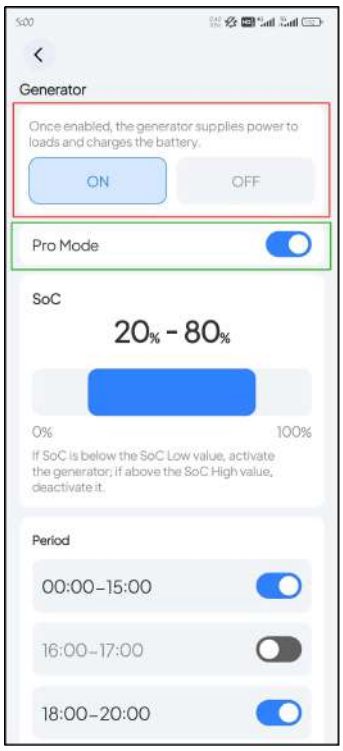
Step 5:Enable Generator

Access the "Advanced Settings" page in the app and turn on the **"**Enable Generator" Mode. Refer to the product's app user manual for detailed instructions.



Step 6:Enable or disable the Pro mode

After entering the detailed settings page of the generator, two environments can be selected to control the ignition of the generator: ① Do not enable Pro mode, ② Enable Pro mode



① Do not enable Pro mode
Turn off the "Pro mode" switch (SOC and time period control parameters no longer take effect), and only the "Generator Enable" can control whether to ignite (turn on → ignite; turn off → stall)

② Enable Pro mode
Turn on the 'Generator Enable' switch, activate the 'Pro mode' switch, set SOC and time period control to intelligently control the ignition timing of the generator.

Attention: "Generator Enable" is the main switch. When turned off, the oil engine will shut down; In the open state, prioritize whether to ignite according to the settings parameters of the Pro mode.

In Pro mode, 'time period control' has a higher priority than 'SOC'. Up to 3 time periods can be set, and the switch on the right side of each time period controls whether the ignition occurs during that time period (on → ignition during time period; off → shutdown during time period)

In Pro mode, if the current time is outside the set time period, the ignition is determined by the upper and lower limits of SOC. For example, between 15:00 and 16:00, if the SOC of the battery is ≤ 20%, the oil engine will ignite; On the contrary, if the SOC of the battery is ≥ 80%, the engine will shut down. (Assuming that the ignition of the fuel engine is triggered when SOC ≤ 20%, and the fuel engine remains in the ignition state until SOC reaches 80% without being interrupted by the time period)

Step 7: Initiate

Turn on the “System Switch” to enable the Generator via the app.

- **NOTE:**
- The Generator application cannot be enabled at the same time as the AC coupling application/ micro-inversion application.