

RI-ENERGYFLOW-MODULAR

Inverter and Battery Final Installation Check List

Once the system has been installed and programmed in accordance with the installation guide, please double check the following parameters to confirm that the system is working correctly.

1. Have all the steps listed in the quick installation guide been completed. Yes/No

2. Confirm that all isolators are turned ON, and that the Inverter display is illuminated, and that the battery module green LEDs are ON. Yes/No

3. Check that the following important settings have been correctly programmed: STATE = Self Consume (CSM) and GRID = U.K. (note "INDEPEN" is a default setting, which can be changed, see installation guide).

| | | |
|------------------|---|--------------------------|
| SYSTEM | | |
| STATE : SELF CSM | → | Setup Status (Work Mode) |
| GRID : U.K. | → | Grid Standard |
| PV I/P : INDEPEN | → | PV Mode (PV Input) |

Yes/No

4. Check that there is PV input voltage on PV1 (& PV2 if 2 strings connected). During daylight hours you should have a voltage reading, and a power reading (providing the voltage exceeds 130V).

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|------------------|---|-------------------|
| PV1 INPUT | | |
| VOLT : 33.8V | → | PV1 Input Voltage |
| CURR : 0.00A | → | PV1 Input Current |
| POWER : 0W | → | PV1 Input Power |

If you have no reading check the following:

- The external PV isolator is turned on
- The PV isolator on the Inverter is turned on
- Power will be displayed once Voltage exceeds 130V
- Measure the PV input to check that you have voltage.
- Check that the correct polarity is connected to PV1+ and PV1-

Yes/No

5. Check that the Battery is communicating with the Inverter. There should be a reading for both TEMP (Battery temperature) and SOC (Battery state of charge).

| | | |
|-------------------|---|-----------------------|
| BMS PARAM | | |
| TYPE : RI-MOD 5.1 | → | Battery Type |
| TEMP : 25°C | → | Battery Temperature |
| SOC : 90% | → | Percentage of Battery |

If you have 0% and 0°C for Temp and SOC, then the battery communication cable may not be connected correctly, ensure that the cable is properly connected and that terminals are clean and free of debris.

Yes/No

6. Check the correct installation of the Current Transformer (CT). It is most important that the current transformer is positioned in the correct part of the circuit, and that the energy flows through it in the correct direction, please see installation guide. To check correct installation of the CT, ensure there is a load being consumed by the house, if not turn on a Kettle. Check the POWER screen which should now show a positive load in Watts.

| POWER | | |
|--------|-------|------------------------|
| INV : | 3010W | → Inverter Total Power |
| GRID : | W | → Grid Total Power |
| LOAD : | 3010W | → Load Total Power |

If there is no LOAD reading, and there is a load on the House the CT is likely to be fitted incorrectly. Check to make sure the CT is installed as per the installation instructions and that the arrow is pointing towards the Grid. Note the white wire from the transformer is S1+ and the black wire is S2-

| | |
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| Yes/No | <input type="checkbox"/> |
|--------|--------------------------|

7. Check that the battery is supplying power to the load. Providing the battery state of charge (SOC) is >10% and the house is consuming a load (turn on a kettle to confirm) the reading BAT should be positive, if the reading is negative then the battery is charging. In this situation the current transformer is probably pointing in the wrong direction.

| POWER | | |
|----------|-------|-------------------------------------|
| PV : | W | → PV Generation Power |
| BACKUP : | W | → Backup Output Power |
| BAT : | 3102W | → Total Power Supplied from Battery |

| | |
|--------|--------------------------|
| Yes/No | <input type="checkbox"/> |
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8. Please remember to install the Wi-Fi dongle to the Inverter, connect to the customers WI-FI and set up the Solarman App on the customers' mobile phone (See instructions supplied with WI-FI dongle). This step is important as the validity of the warranty is dependent on the inverter being connected to the internet.

| | |
|--------|--------------------------|
| Yes/No | <input type="checkbox"/> |
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