INSTRUCTIONS FOR CONNECTION THE BATTERY PACK TO DEYE INVERTERS

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LITHIUM IRON PHOSPHATE
LIFEPO4 BATTERY PACK

51,2V 100Ah

KT-LFPES512100

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1. PRECONDITIONS

Before connecting the battery with inverter.make sure the following rules are complied.

1. The battery system discharge power/current is proper with the inverter power. It is recommended to configure the inverter capacity with battery in 1: 2 proportion, for example. If you have a 5 kW rated inverter, connect at least 2 batteries (10kWh),
2. If the system is an off-grid system, make sure that configuration can manage to avoid overdischarging the battery. It is strongly recommended to install a smart generator and MPPT modules (brands like Victron that support DC-coupled application).
3. Make sure that the installation environment, setting and sequence is following the User Manual.

2. COMMISSIONING WITH INVERTER

2.1 DEVICE SUPPORT

Deye/Sunsynk Hybrid inverter and Kon-TEC KT-LFPES512100 battery can be used for following system types

- Energy Storage Systems
- Grid Backup
- Off-grid

Compatible device:
SUN-SG04LP1-EU / SUN-SG03LP1-EU / SUN-SG05LP1-EU / SUN-SG04LP3-EU / SUN-SG01LP1-EU

2.1.1 CABLE CONNECTION

1. Keep both inverter and battery completely off.
2. Connect the communication cable to the system according to the following schematic

Kon-TEC Battery BMS CAN port		Deye/Sunsynk inverter CAN port	
Pin 4	H	Pin 4	H
Pin 5	L	Pin 5	L
Pin 6	GND	Pin 2 or Pin 6 (based on model)	GND

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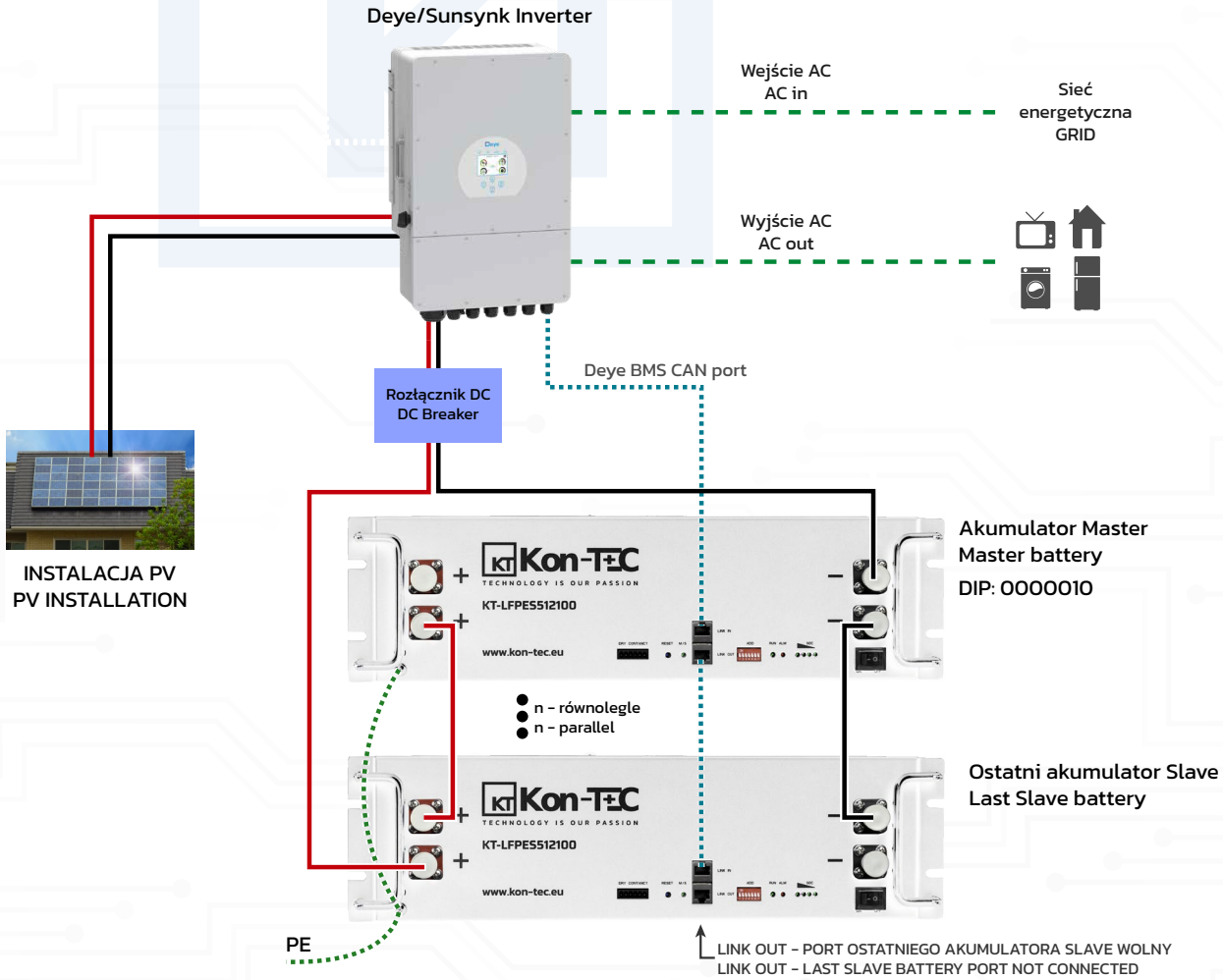

2.1.2 START SYSTEM

1 Set the Master battery (ONLY!!!) DIP address according to the User Manual (Picture above).
2 Press the Master battery reset button to switch on all the batteries and then close the battery breaker to start inverter.
3 Turn on inverter DC switch, then press "ON" button to power on the inverter. Then turn on AC input and output breaker.

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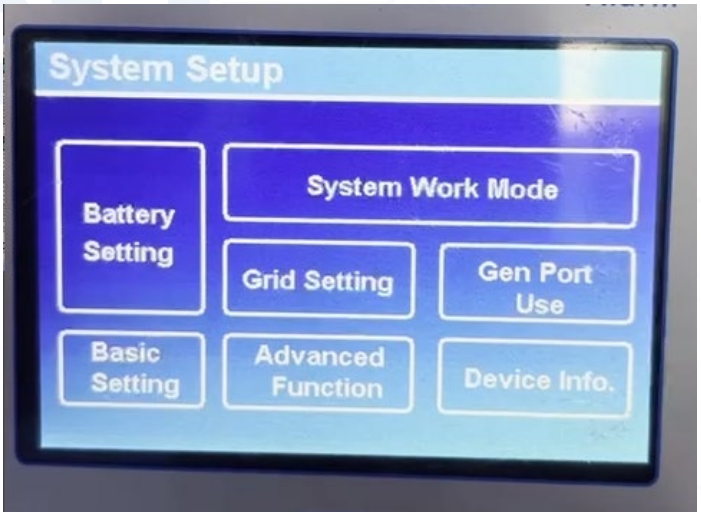
2.1.3 INVERTER SETUP

1 Check the inverter screen, if green LED is on, and there is no alarm LED, it means that everything is proper, otherwise please check inverter manual for troubleshooting.
2 Click the setting icon on the screen top right and choose battery setting



3 Enter the Battery Setting and set the following values

If we configure the inverter with the battery connected via the CAN communication cable (inv. BMS CAN, Master battery Link In) we set the following parameters (in each window, press the button ∨ to confirm the parameters, otherwise the settings will not be set):

Battery Setting:
Batt Mode: Lithium
Batt Capacity: 100Ah * N (N indicates the number of battery pack in parallel)
Max A charge: 50A * N (N indicates the number of battery pack in parallel)
Max A discharge: 50A * N (N indicates the number of battery pack in parallel)
Activate battery: enable
Lithium mode: 00
Shutdown: ≥ 10%
Low batt: ≥ 20%
Restart: ≥ 30%
Grid charge: enable
Gen charge: enable (if using Diesel generator)

However, if we configure the battery WITHOUT connection with a communication cable by the CAN port, enter the settings manually:

Batt mode: Use Batt V
Max A charge: 50A * N (N indicates the number of battery pack in parallel)
Max A discharge: 50A * N (N indicates the number of battery pack in parallel)
Activate battery: enable
Shutdown: ≥ 10%
Low batt: ≥ 20%
Restart: ≥ 30%
Grid charge: enable
Gen charge: enable (if using Diesel generator)
Float V: 54,6V
Absorption: 56,0V
Equalization V: 56V
Equalization Days: 15 days
Equalization Hours: 2.0 hours

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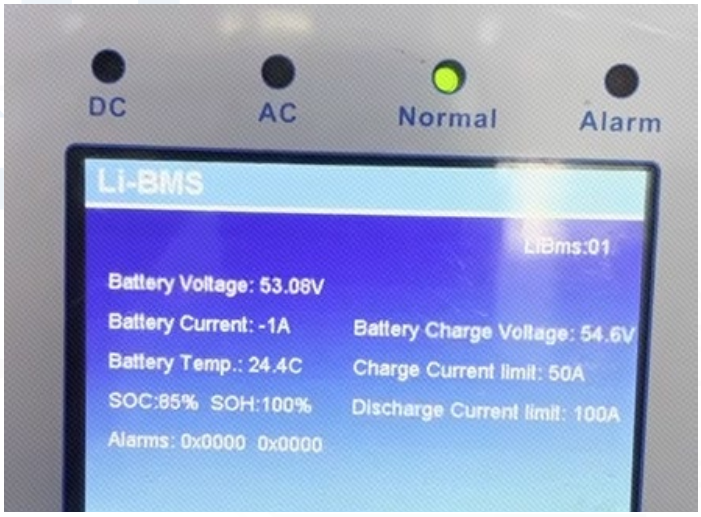
4 Back to the home screen and click the battery icon to check if communication and parameters are correct.



5 Confirm all the parameters and then finish other settings (TOU, Zero export etc.) on the inverter according to the inverter manual.
6 If parameters are set correct, you are ready to use the system.

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