

# **Pytes Low Voltage Battery Series Configuration Guide with GOODWE**

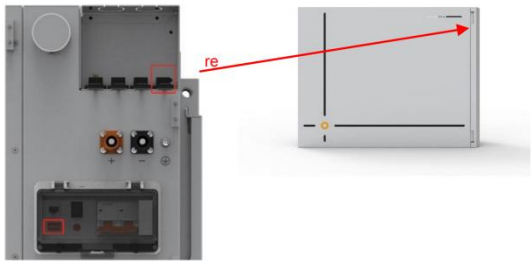
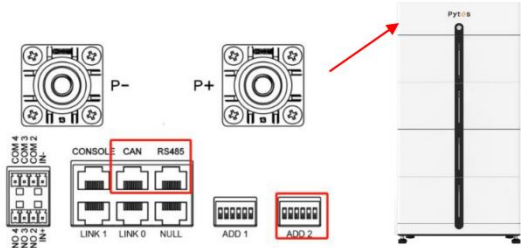
**Pytes Lithium Battery**

**With GOODWE Energy Storage Inverter**

**GW-BP/SBP/GW-ES/EM**

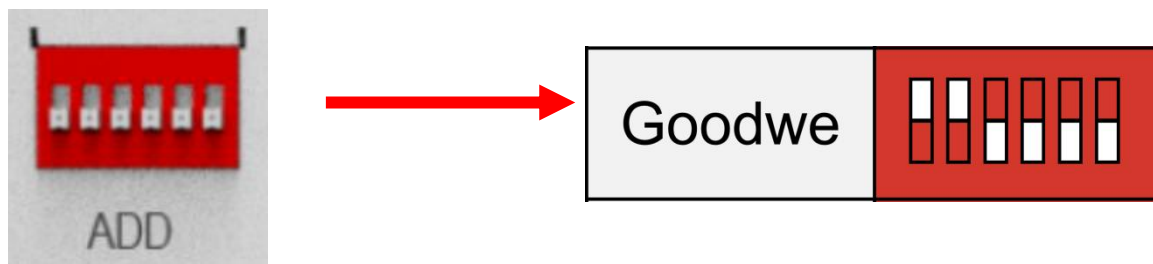


## Pytes low voltage battery interface overview

| No. | Item Name      | Product Picture                                                                      |
|-----|----------------|--------------------------------------------------------------------------------------|
| 1   | E-BOX 4850-C   |    |
| 2   | E-BOX 4850G    |    |
| 3   | E-BOX 48100R-C |    |
| 4   | V5°            |    |
| 5   | V5°α           |    |
| 6   | V5°α Plus      |   |
| 7   | V10            |  |
| 8   | V15            |  |
| 9   | Pi LV1         |  |

## Set the Dip Switch

Only need to set the master battery Dip Switch to the corresponding position as shown. The Dip Switch (ADD) location varies for each battery model; please refer to the respective user manual for details.



## Select the correct the communication cable between battery and Inverter

Select the correct the communication cable and the correct pinout of communication port on the battery according to the Pin Definition List. If the pin definitions of the battery and inverter align, a standard ethernet cable can be used. Otherwise, the cable needs to be adjusted.

| Pin Number | Battery Pin Definition | Inverter Pin Definition |
|------------|------------------------|-------------------------|
| 1          | RS485B                 |                         |
| 2          | RS485A                 |                         |
| 3          | GND                    |                         |
| 4          | CAN-H                  | CAN-H                   |
| 5          | CAN-L                  | CAN-L                   |
| 6          | GND                    |                         |
| 7          | RS485A                 |                         |
| 8          | RS485B                 |                         |

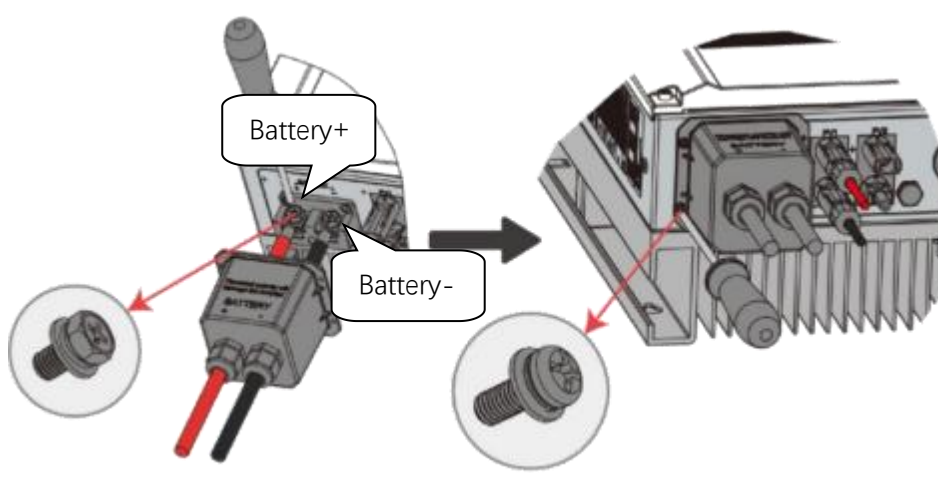
## 1. Power Cable Connection

### Step.1

Open the cap of the Goodwe inverter.

### Step.2

Strip cable coat, revealing 10mm length of metal core. Use special crimper to compress battery terminal tightly.



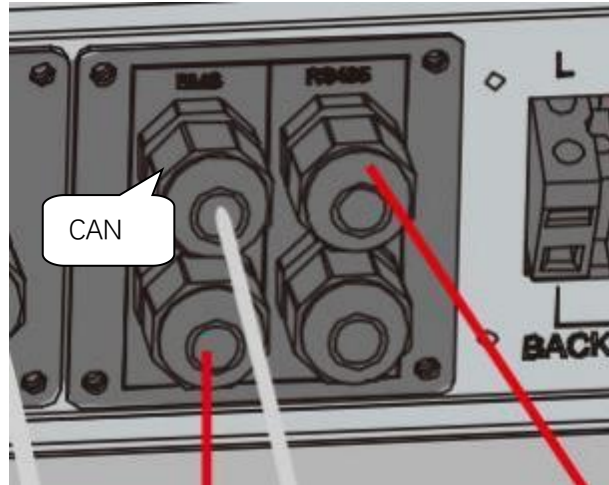
Pic 1.1

### Step.3

Connect battery terminal onto inverter .

## 2. Communication Cable Connection

Open the cap and connect the end of the cable to the battery communication port (Check Page2) other end to port as shown in pic 2.1.



Pic 2.1

### 3.Start up the system

Start up the inverters and batteries.

### 4.Connect to smart phone

#### Step.1

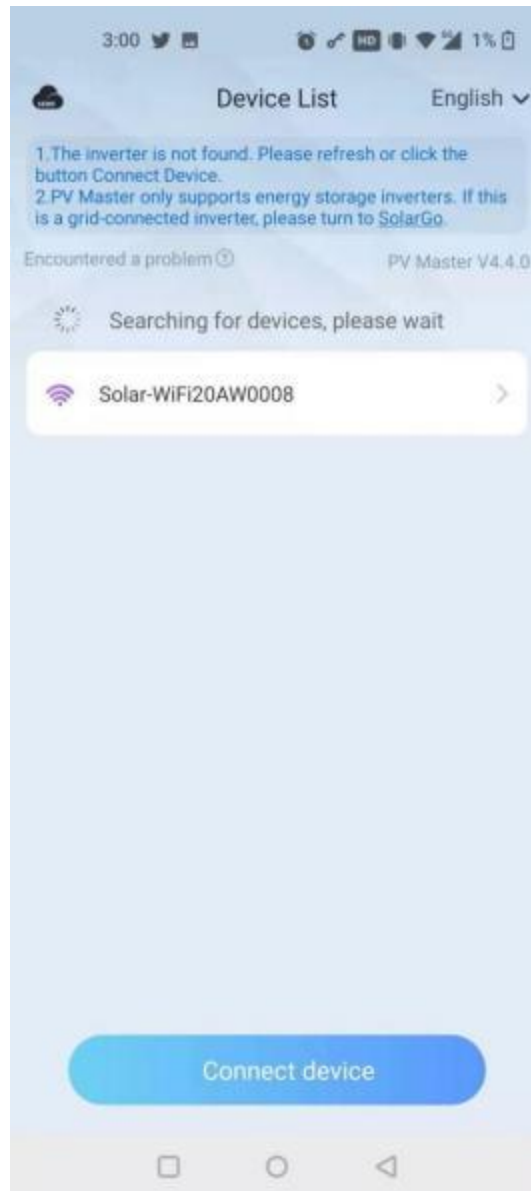
Download the app PV master from the app store.



Pic 4.1

## Step.2

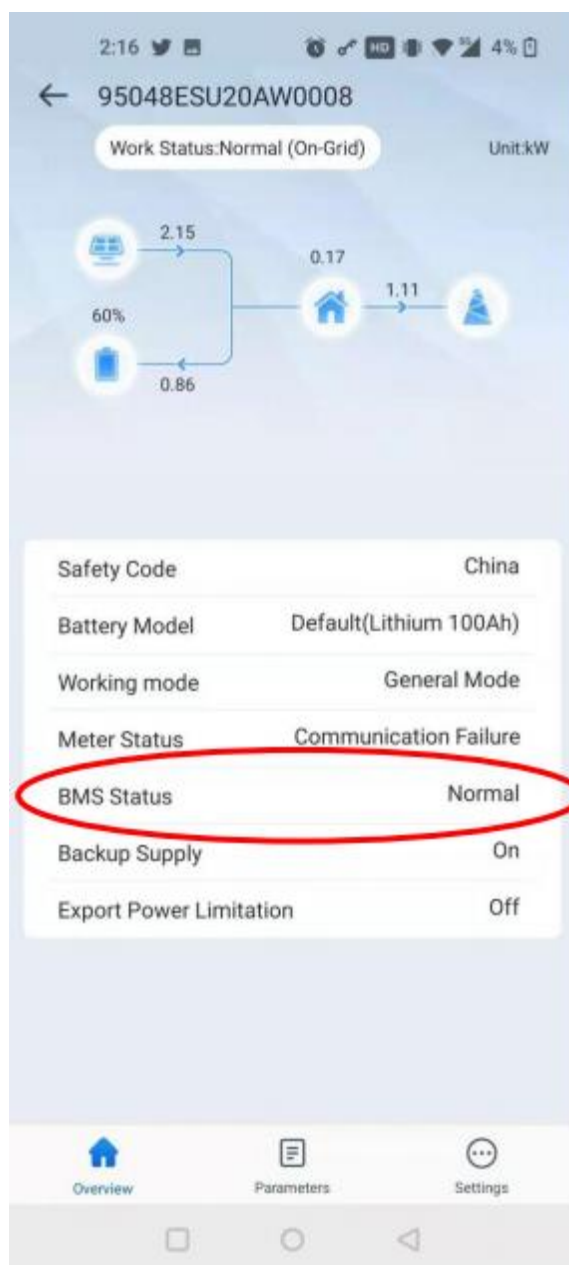
Start the APP then connect to the solar-WIFI ,password is 12345678.



Pic 4.2

### Step.3

The BMS status will be showed on the interface if the connection between battery and inverter is correct.



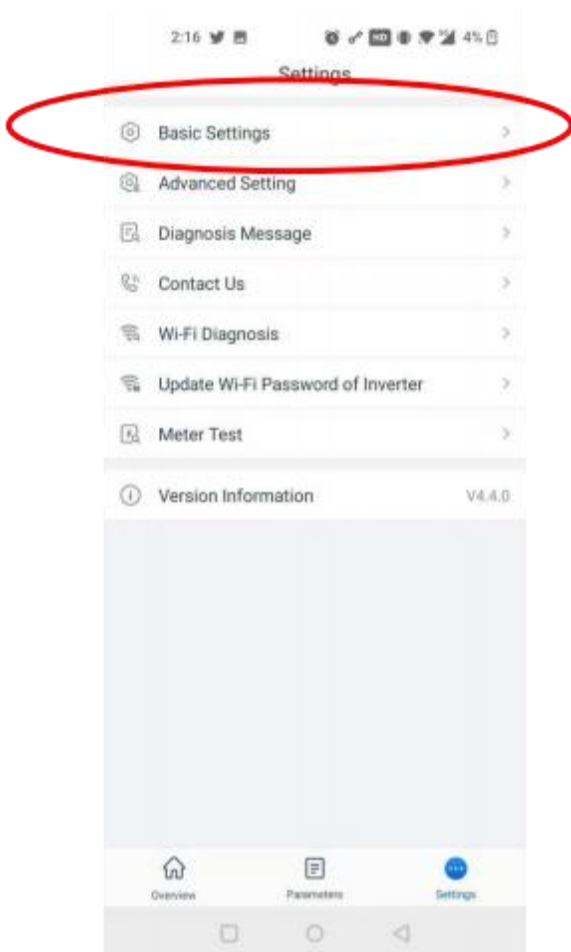
Pic 4.3

## 5.Change the battery setting of the inverter

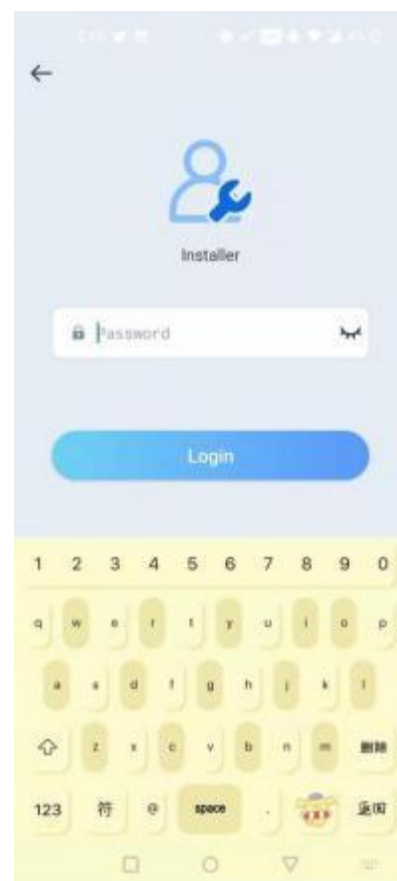
※CAUTION:If you want more details about the batteries settings , please check the operating manual of inverters.

### Step1.

Choose the Basic settings in settings icon. The Installer login password is: goodwe2010.



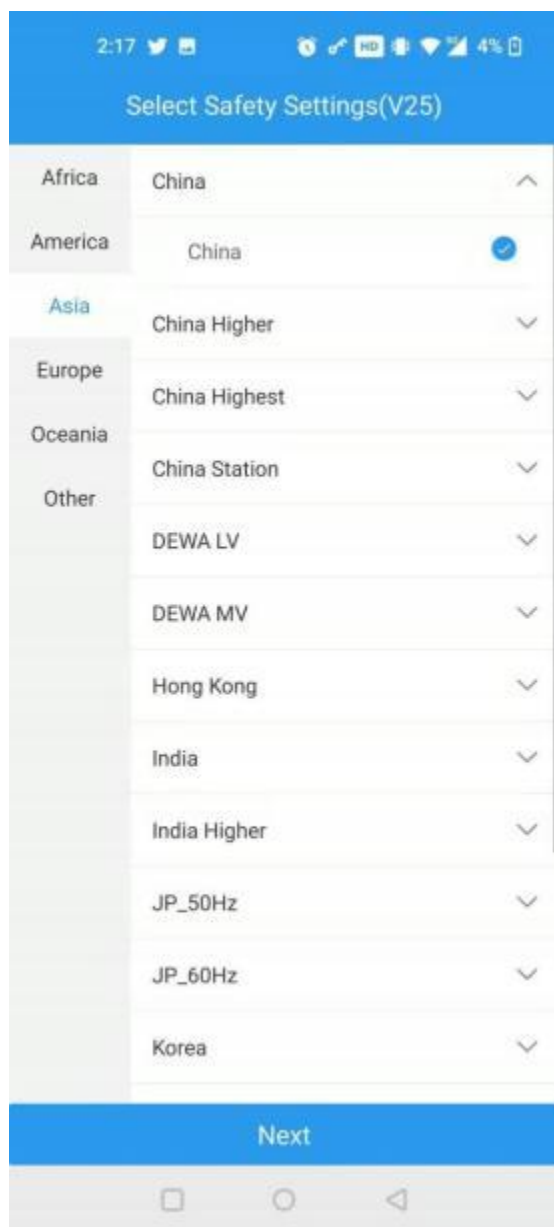
Pic 5.1



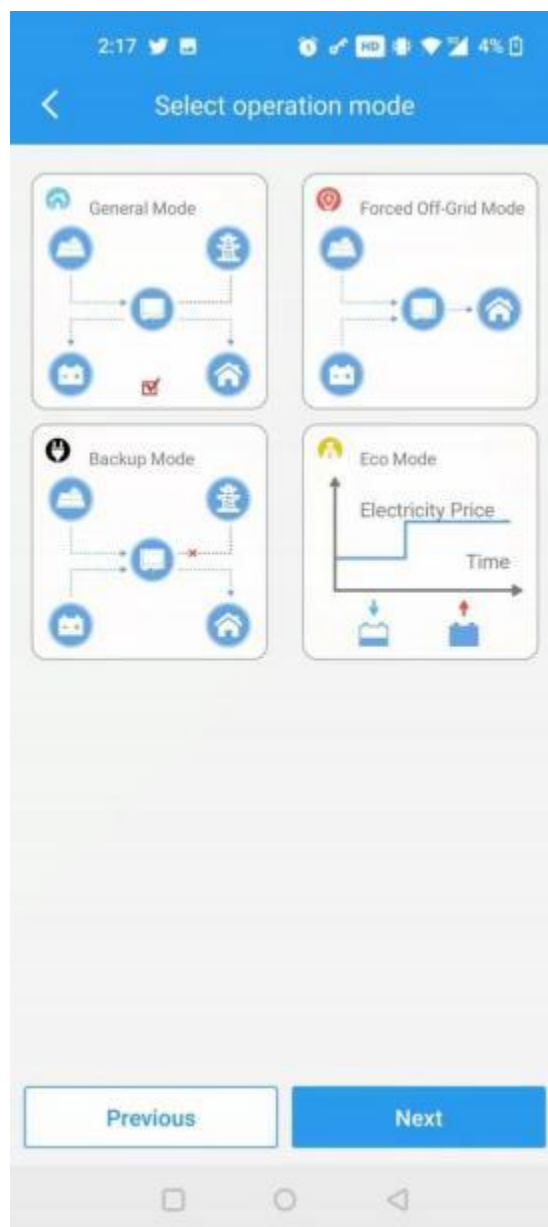
Pic 5.2

## Step.2

Select your safety settings and operation mode.



Pic 5.3

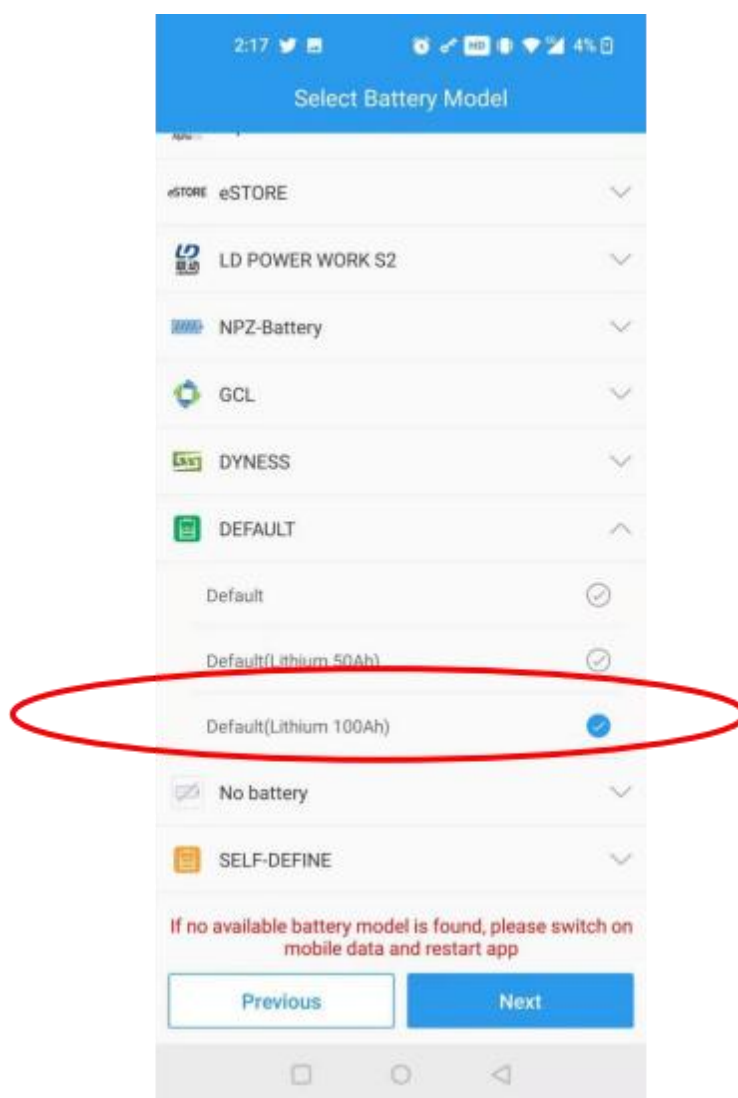


Pic 5.4

### Step.3

Select battery model to default(lithium 100Ah), restart the inverter.

(If your battery model is 48100C,you can choose LBS051200A-A02)



Pic 5.5

You can also choose self define to define the settings yourself.  
E.g. three V5° → Battery Capacity: 300Ah;  
Charge/discharge current :225A

|                                                                                                                                                                                |                                     |         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------|
| Battery Capacity                                                                                                                                                               | <input type="text" value="100"/>    | Ah      |
| Set battery capacity value (Ah)                                                                                                                                                |                                     |         |
| Charge Voltage                                                                                                                                                                 | <input type="text" value="57.5"/>   | V       |
| For the maximum charge voltage, refer to the user manual datasheet. Enter the appropriate value carefully according to the battery parameters and connection structure.        |                                     |         |
| Charge Current                                                                                                                                                                 | <input type="text" value="50"/>     | A       |
| For the maximum charge current, refer to the user manual datasheet. Enter the appropriate value carefully according to the battery parameters and connection structure.        |                                     |         |
| Discharge Current                                                                                                                                                              | <input type="text" value="50"/>     | A       |
| Set the max discharge current (only On-Grid mode)                                                                                                                              |                                     |         |
| SOC Protection                                                                                                                                                                 | <input checked="" type="checkbox"/> |         |
| The battery stops discharging when the depth of discharge set below is reached. E.g. if the discharge depth is set to 60%, the battery stops discharging when SOC reaches 40%. |                                     |         |
| Depth Of Discharge (On-Grid mode)                                                                                                                                              | <input type="text" value="90"/>     | %       |
| DOD means the max percentage of battery power capacity that is allowed to discharge. Only effective when SOC Protection is turned ON                                           |                                     |         |
| Depth Of Discharge (Backup Mode)                                                                                                                                               | <input type="text" value="90"/>     | %       |
| DOD, the max percentage of battery power capacity allowed to discharge. Only effective when SOC Protection is turned ON.                                                       |                                     |         |
| Floating Voltage                                                                                                                                                               | <input type="text" value="58.0"/>   | V       |
| 3V lower than charge voltage is recommended.                                                                                                                                   |                                     |         |
| Floating Current                                                                                                                                                               | <input type="text" value="2"/>      | A       |
| Set battery floating current                                                                                                                                                   |                                     |         |
| Floating Time                                                                                                                                                                  | <input type="text" value="30.0"/>   | minutes |
| Set floating charge time                                                                                                                                                       |                                     |         |
| <input type="button" value="Set"/>                                                                                                                                             |                                     |         |

Pic 5.6

## 6. Check the battery SOC

Now you can monitor your plant in the PV master interface.



Pic 6.1