

# Installation and configuration manual

## With AFORE

**Pytes Lithium Battery**

**E-BOX series**

**With AFORE Hybrid Inverter**

**SUN series**



## CONTENTS

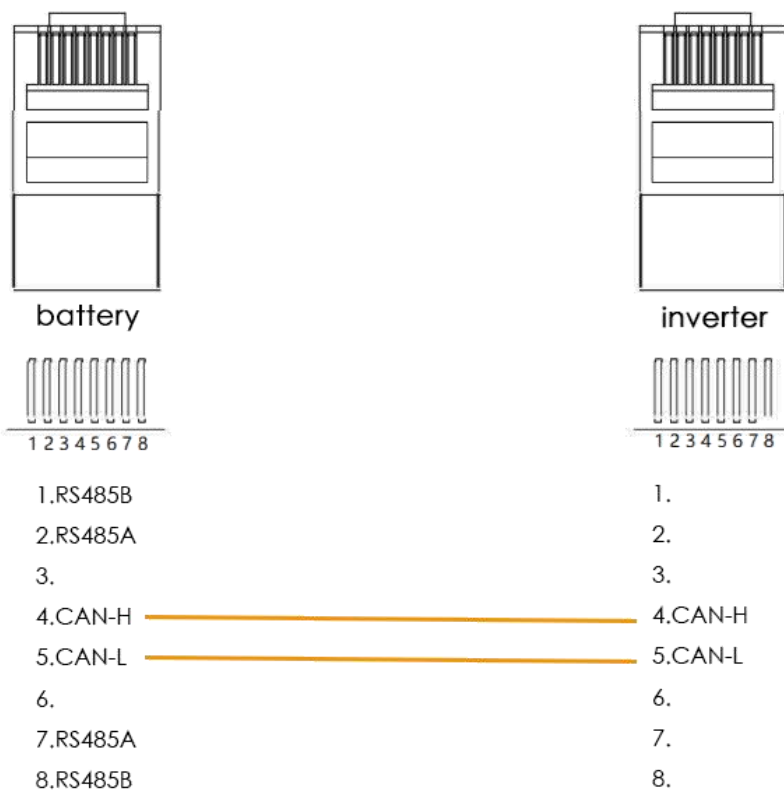
BOM LIST .....	3
1. Power Cable Connection .....	5
Step.1 .....	6
Step.2 .....	6
Step.3 .....	7
2. Communication Cable Connection .....	7
3. Set The DIP Switch .....	8
4. Start up the system .....	8
5.Change the battery setting of the inverter .....	8
Step1 .....	9
Step2 .....	10
Step3 .....	11
6.Check the battery soc .....	12
Step.1 .....	12

## BOM LIST

Before installation, you should prepare following items.

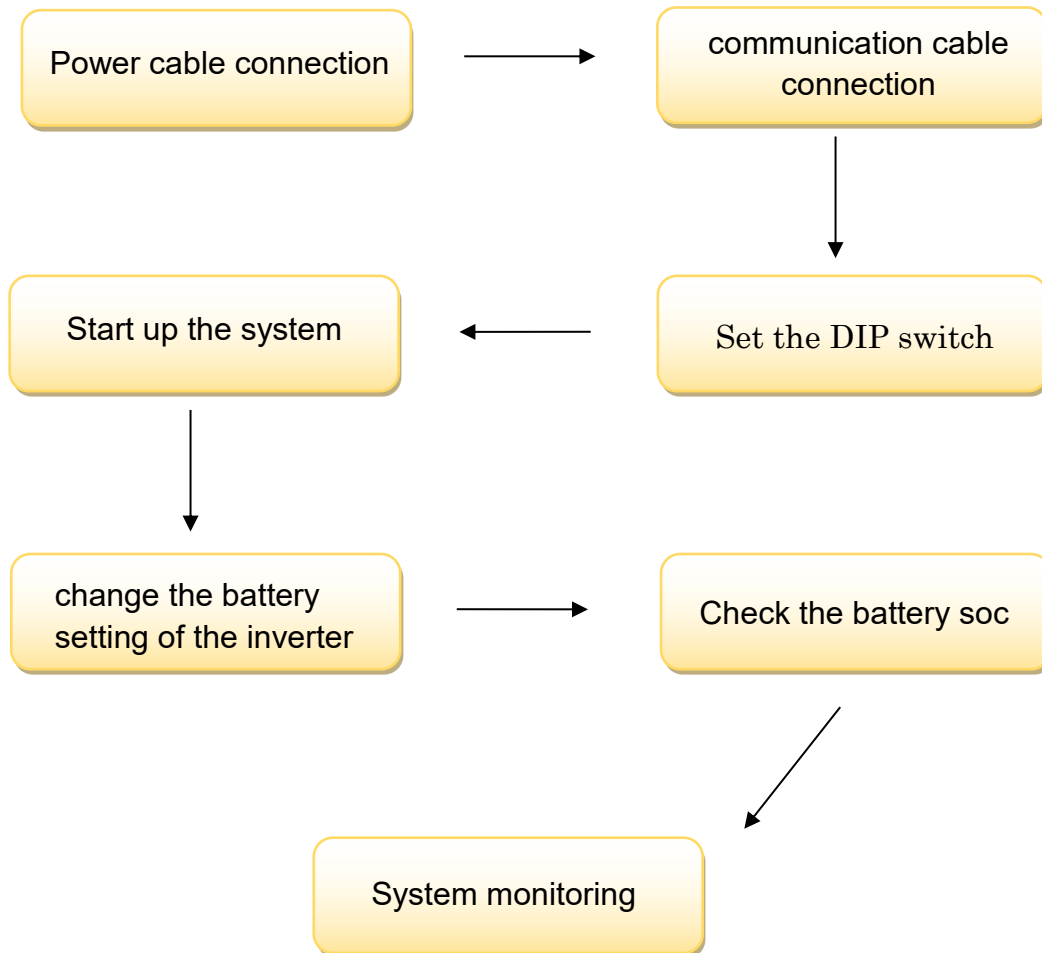
Item	Remarks	Quantity
<b>Power Cable (DC)</b>	<input type="checkbox"/> Conductor cross-section: 50 mm <sup>2</sup> to 95 mm <sup>2</sup> <input type="checkbox"/> Cable diameters: 14 mm to 25 mm <input type="checkbox"/> Only copper cables may be used. <input type="checkbox"/> The DC cables must be sized for the maximum battery voltage and the maximum battery current (see battery manufacturer documentation).	Depends on the number of batteries and the connection method
<b>CAN Cable</b>	CAN communication Terminal (RJ45 port) follow CAN protocol, to output batteries information	1
<b>Twist Pair Cable</b>	For Ethernet Connection between PC and Inverter	1
<b>PC (Personal Computer)</b>	Provide for oneself	1
<b>Battery</b>	48100R / 48100C / 4850	Depends on the number of batteries and the connection method
<b>Inverter</b>	AFORE HF4850S80-H	1

Defintion of RJ45 Port Pin for BMS is as follow.



### CAN port definition

## HOW TO INSATLL



**CAUTION:** If you want to get more inverter-related settings, please refer to the inverter user manual first.

## 1. Power Cable Connection

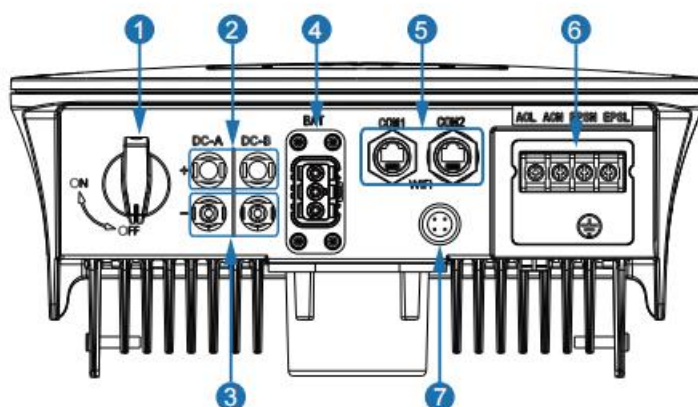
### Step.1

Open the front housing of the AFORE Sun Series.

### Step.2

Connect the red and black cables to the inverter DC connector as shown in Pic 1.1.1.

Inverter Terminals



No.	Items	No.	Items
1	DC Switch	5	Communication Port
2	DC Connectors ( + ) For PV Strings	6	AC Port & EPS Port
3	DC Connectors ( - ) For PV Strings	7	Monitor Module Port
4	Battery Port		

Pic 1.1.1

### Step.3

At the other end of the cable, connect to the battery as shown Pic

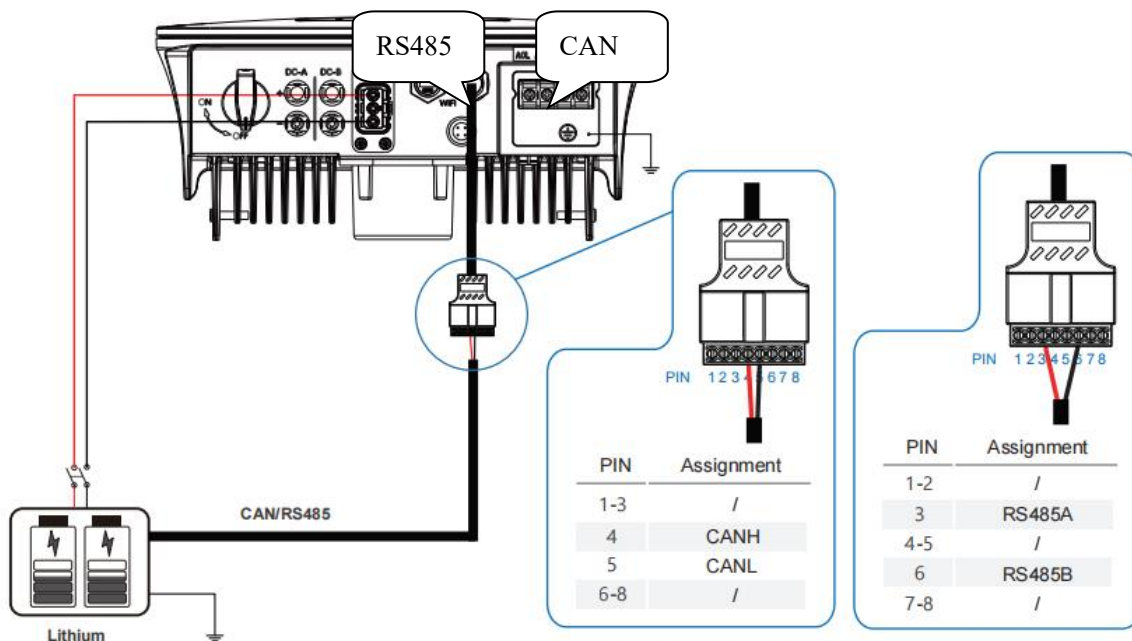
1.1.2. (Ensure that the battery power switch is off)



Pic 1.1.2

## 2. Communication Cable Connection

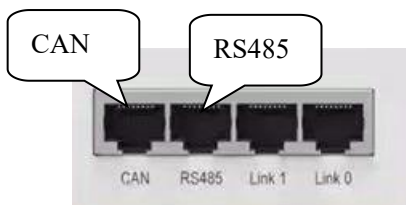
Connect the end of the cable to the inverter communication port as shown in pic 1.2.1. Make sure use CAN communication port .



Pic 1.2.1

Connect the other end of the cable to the battery communication port as shown in pic 1.2.1. (Ensure the correct sequence of wires inside the

communication cable)



Pic 1.2.2

### 3. Set The DIP Switch

Set the DIP switch as shown in graphic 1



Pic 1.2.3



graphic 1

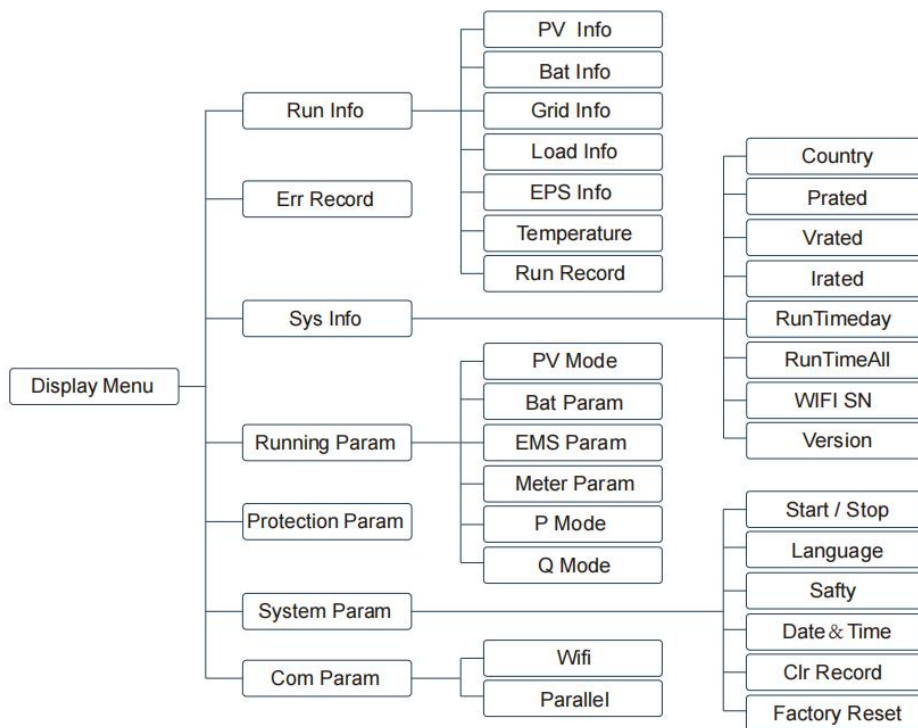
### 4. Start up the system

Start up the inverters and batteries.

### 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. Set the inverter protocol to AFORE

Step1: “ ← ” Entry Menu;

Step2: “ ▲/▼ ” Up/Down Chose Running Param, “ ← ” Confirm;

Step3: Password Confirm, ▲/▼ Up/Down Chose “5432”, “ ← ” Confirm;

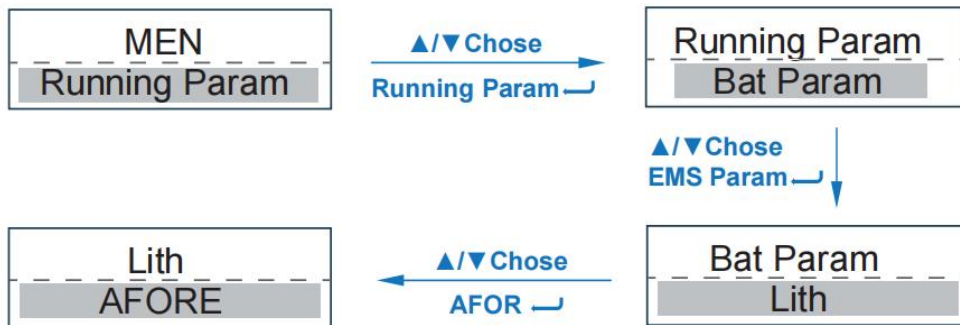
Step4: “ ▲/▼ ” Up/Down Chose Lith (Lithium Battery), “ ← ” Confirm;

Step5: “ ▲/▼ ” Up/Down Chose

IvyHv/JBS48/JBSHV/HSD48/TaiSu/HSDHV/**Afore**

/PYLON/Ivy48/, “ ← ” Confirm;

Step6: “ ← ” Return.



## Step2. Set Energy Management System

Step1: “←” Entry Menu;

Step2: “▲/▼”Up/Down Chose Running Param, “←” Confifirm;

Step3: Password Confifirm, ▲/▼ Up/Down Chose

“5432”, “←” Confifirm;

Step4: “▲/▼”Up/Down Chose EMS Param, “←” Confifirm;

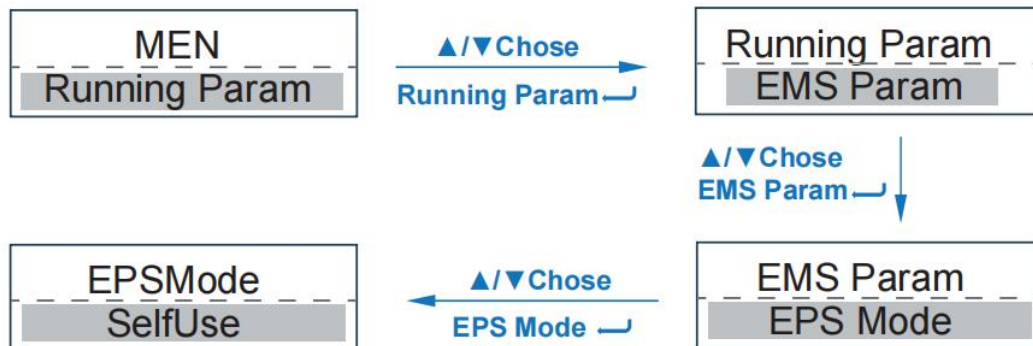
Step5: “▲/▼”Up/Down Chose EMS Mode, “←” Entry MES Setting;

Step6: “▲/▼”Up/Down Chose

cmdChar/ExtEMS/SelfUse/ChgFst/SellFst/

Maintain (Maintenance), “←” Confifirm;

Step7: “←” Return.



**Eps mode should be turned on**

**Step3.**

Step1: “ ← ”Entry Menu;

Step2: “ ▲/▼ ”Up/Down Chose Running Param, “ ← ”Confifirm;

Step3: Password Confifirm, ▲/▼ Up/Down Chose

“5432”, “ ← ”Confifirm;

Step4: “ ▲/▼ ”Up/Down Chose EMS Param, “ ← ” Confifirm;

Step5: “ ▲/▼ ”Up/Down Chose Chg or Dischg Tim, “ ← ” Entry MES Setting;

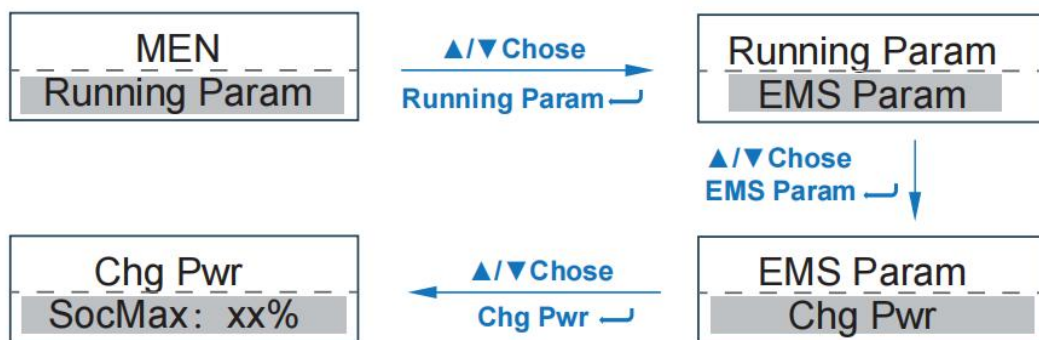
Step6: “ ▲/▼ ”Up/Down Chose Max /Mini Pwr /Max /Mini Volt/Max /Mini Curr,

“ ← ” Confifirm;

Step7: “ ”Return

**Set the charge/discharge voltage to 56v.**

**The charge and discharge current is 50A. SOC is 100%**



## 6. Check the battery soc

Step.1: You can check the battery information on the APP



Pic 3.1.1