Installation and configuration manual With SRNE

Pytes Lithium Battery

E-BOX series

With SRNE Inverter
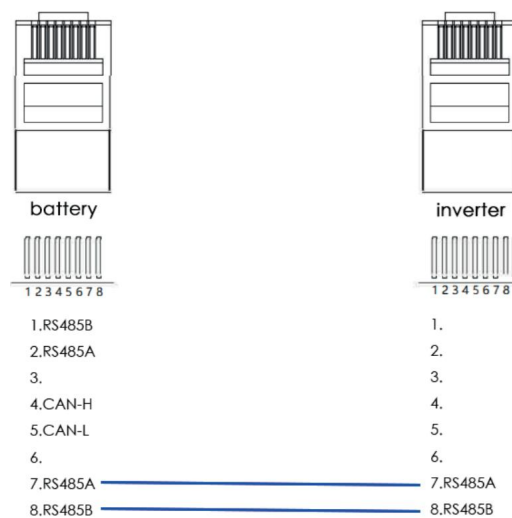
CONTENTS

BOM LIST

Before installation, you should prepare following items.
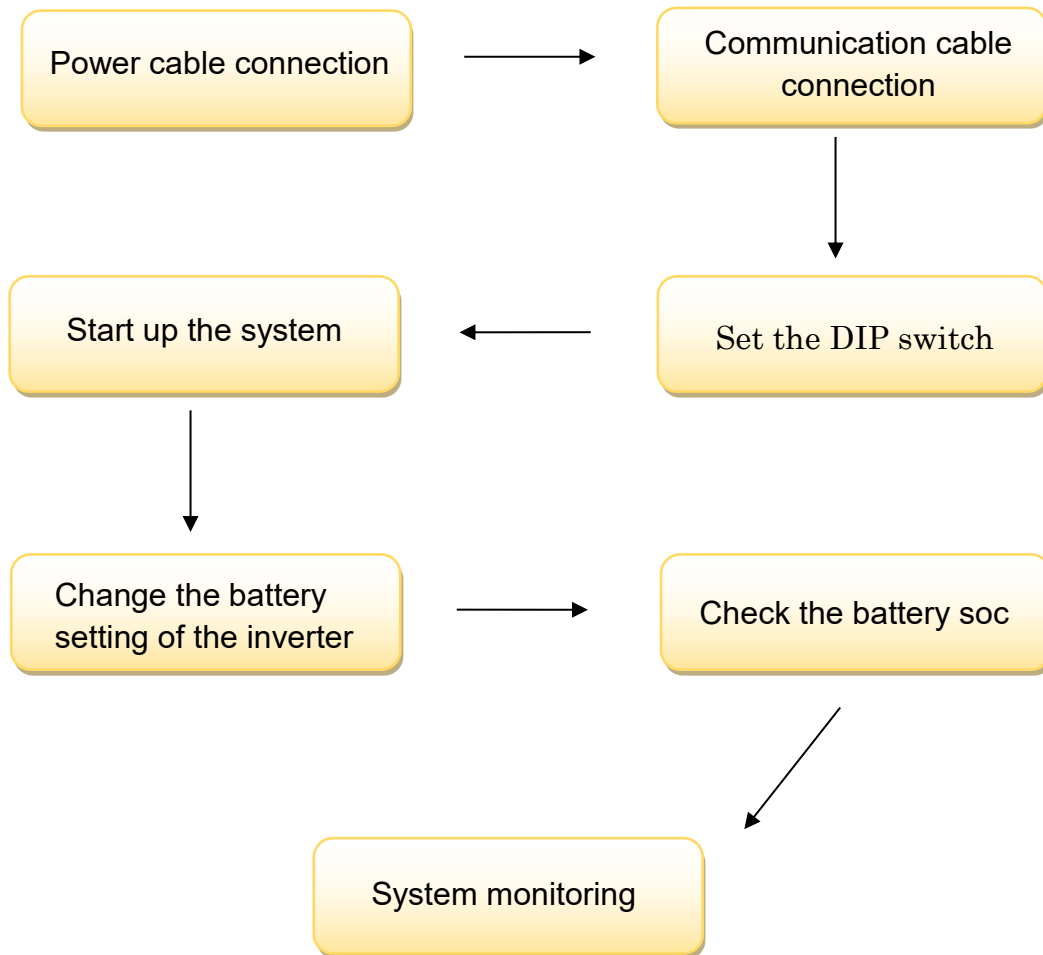
Item	Remarks	Quantity
Power Cable (DC)	□ Conductor cross-section: 50 mm² to 95 mm² □ Cable diameters: 14 mm to 25 mm □ Only copper cables may be used. □ The DC cables must be sized for the maximum battery voltage and the maximum battery current (see battery manufacturer documentation).	Depends on the number of batteries and the connection method
CAN Cable	CAN communication Terminal (RJ45 port) follow CAN protocol, to output batteries information	1
Battery	48100R / 48100C / 4850	Depends on the number of batteries and the connection method
Inverter	SRNE	1

Definition of RJ45 Port Pin for BMS is as follow.

battery

1 2 3 4 5 6 7 8

1.RS485B
2.RS485A
3.
4.CAN-H
5.CAN-L
6.
7.RS485A
8.RS485B

inverter

1 2 3 4 5 6 7 8

1.
2.
3.
4.
5.
6.
7.RS485A
8.RS485B

RS485 port definition(cut off other six pins)

HOW TO INSATLL

```
┌─────────────────────────┐              ┌─────────────────────────┐
│ Power cable connection  │ ──────────▶  │  Communication cable    │
│                         │              │     connection          │
└─────────────────────────┘              └─────────────────────────┘
                                                      │
                                                      ▼
┌─────────────────────────┐              ┌─────────────────────────┐
│   Start up the system   │ ◀──────────  │   Set the DIP switch    │
└─────────────────────────┘              └─────────────────────────┘
           │
           ▼
┌─────────────────────────┐              ┌─────────────────────────┐
│   Change the battery    │ ──────────▶  │  Check the battery soc  │
│  setting of the inverter│              │                         │
└─────────────────────────┘              └─────────────────────────┘
                                                      │
                            ┌─────────────────────────┐
                            │    System monitoring    │ ◀─
                            └─────────────────────────┘
```

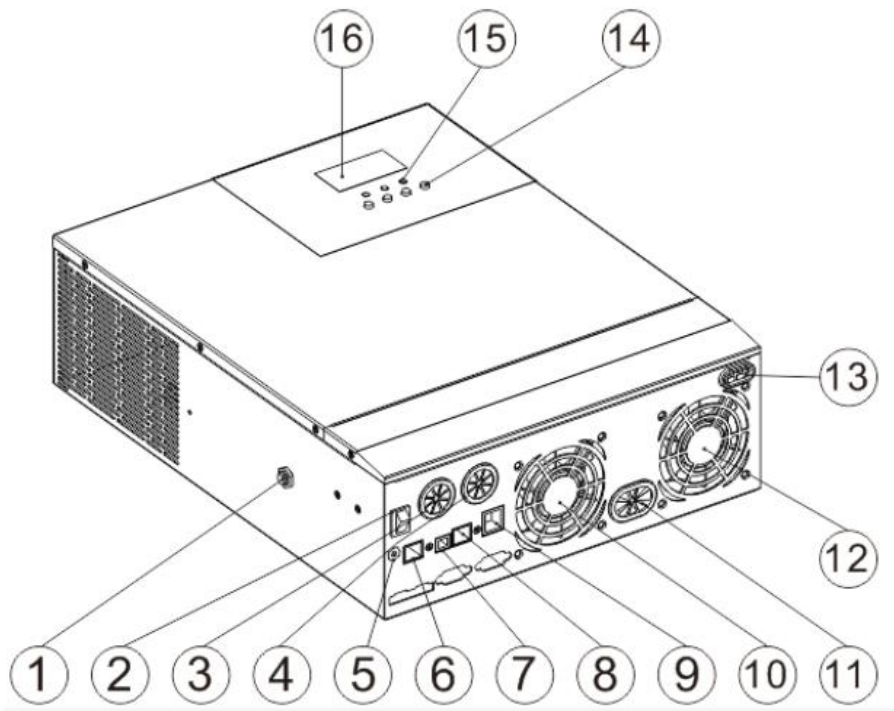**CAUTION: Please turn off the Power Switch of Battery and Inverter before Operation**

1. Power Cable Connection

Step.1

Open the front housing of the SRNE .

Step.2

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

①	Overload protector	⑨	Dry contact port
②	ON/OFF rocker switch	⑩	Cooling fan
③	ACi nput port	⑪	Battery port
④	AC output port	⑫	Cooling fan
⑤	Grounding screw hold	⑬	PV port
⑥	RS485-2 communication port	⑭	Touch the key lightly
⑦	USB communication port	⑮	Indicator light
⑧	RS485-1 communication port	⑯	LCD screen
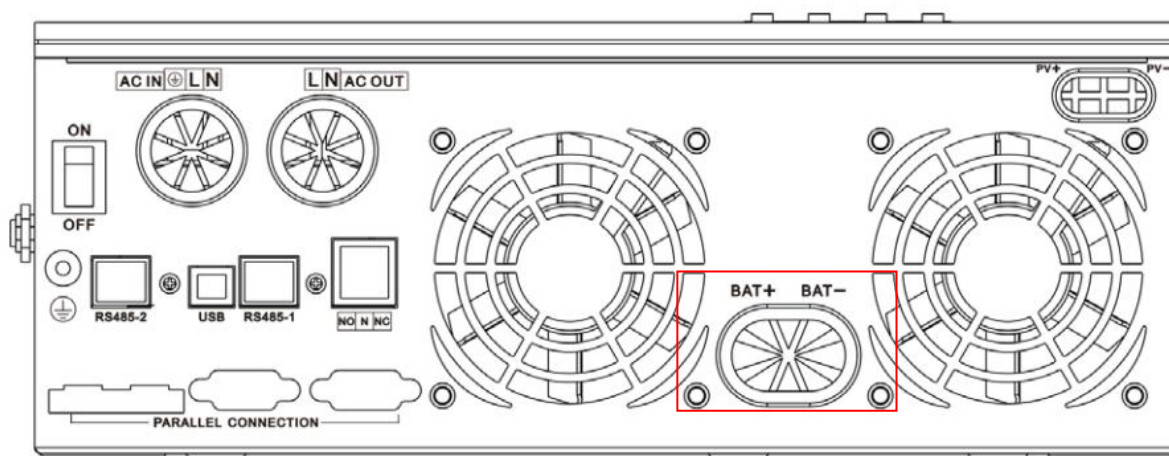
Pic 1.1.1

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）
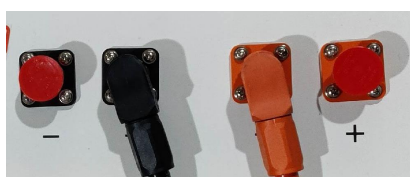

Pic 1.1.2

2. Communication Cable Connection

Connect the end of the cable to the inverter communication port as shown in pic 2.1.1. Make sure which communication port to use. (For some inverter models, RS485-1 may be selected.)
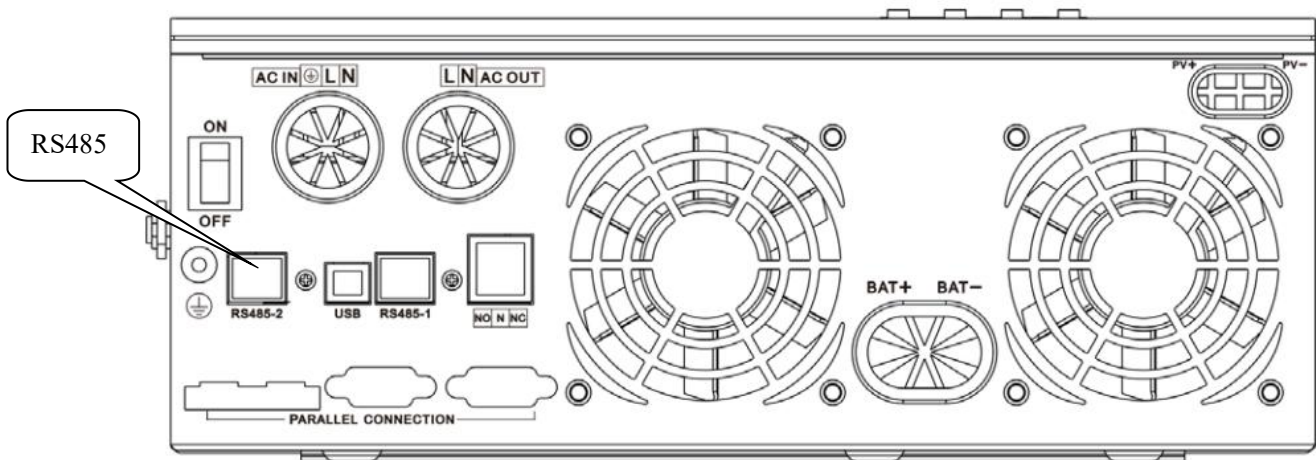
Pic 2.1.1

Connect the other end of the cable to the battery communication port as shown in pic 2.1.2. (Ensure the correct sequence of wires inside the communication cable)
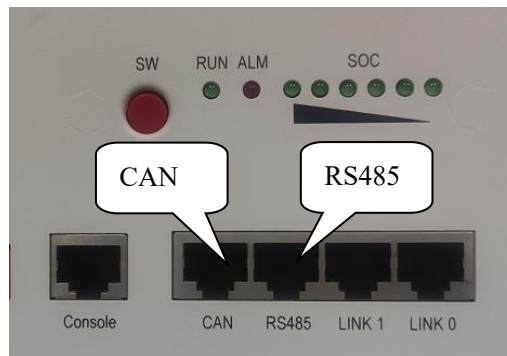
Pic 2.1.2

3. Set The DIP Switch

Set the DIP switch as shown in graphic 1
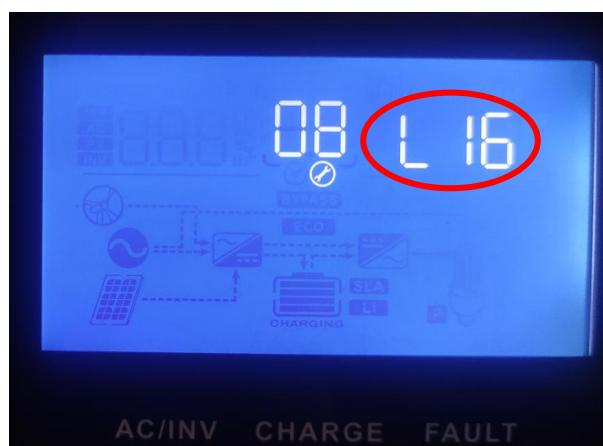

Pic 3.1.1

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**.
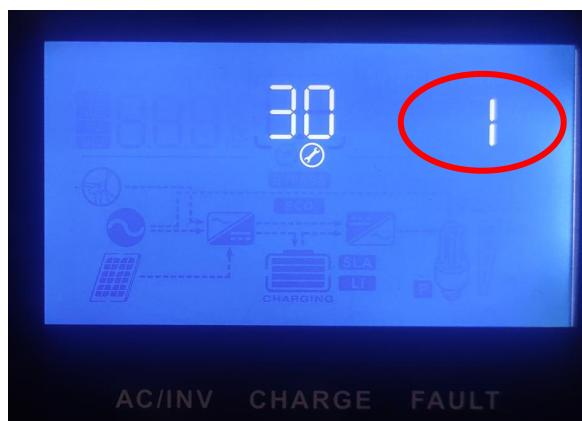
Step1.

For 48100,08 program should be set to L16. (for 4850,08program should be set to L15)
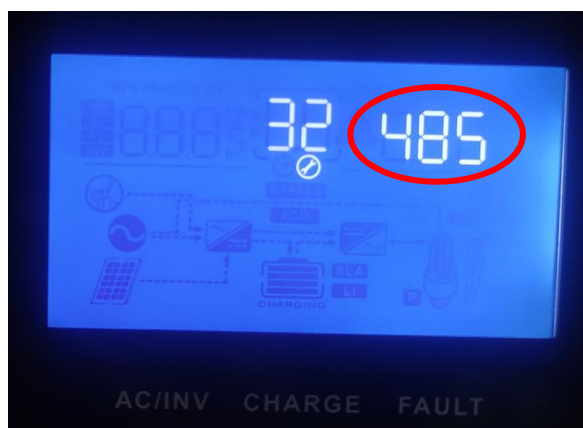

Pic 5.1.1

Step2.

Turn to the 30 program,you can set it to1.

Pic 5.2.1

Step3.

Turn to the 32,set it to 485 . (For some inverter models, BMS may be
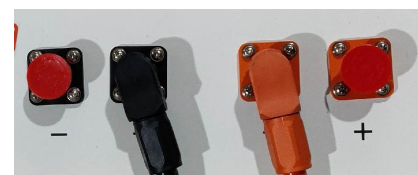
selected)

Pic 5.3.1

Step4.

For program 33, the protocol should be SRNE, as shown in the figure.

Pic 5.4.1

6.Check the battery soc

Step.1 Turn back to home screen. If the battery communicates with the inverter successfully, the Soc will be displayed on the home screen.

Pic 5.4.1

7.System monitoring

※ **CAUTION:If you want more details about system monitoring，please check the operating manual of inverters.**

In the Google Play Store, search for **"SmartESS"** to download and install

Google browser, scan the QR code to download the APP.

Pic 3.2.1