

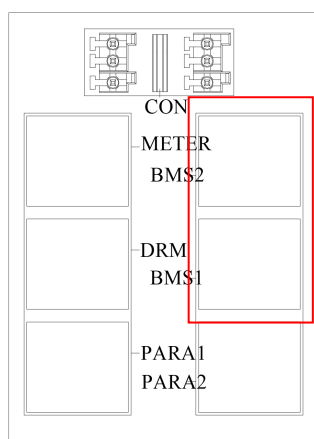
Isuna T-TH

External EMS Device Operation Guide

This guide is designed to help you understand and correctly use this function.

Please read this guide carefully before use and follow the instructions.

1. Physical Wiring



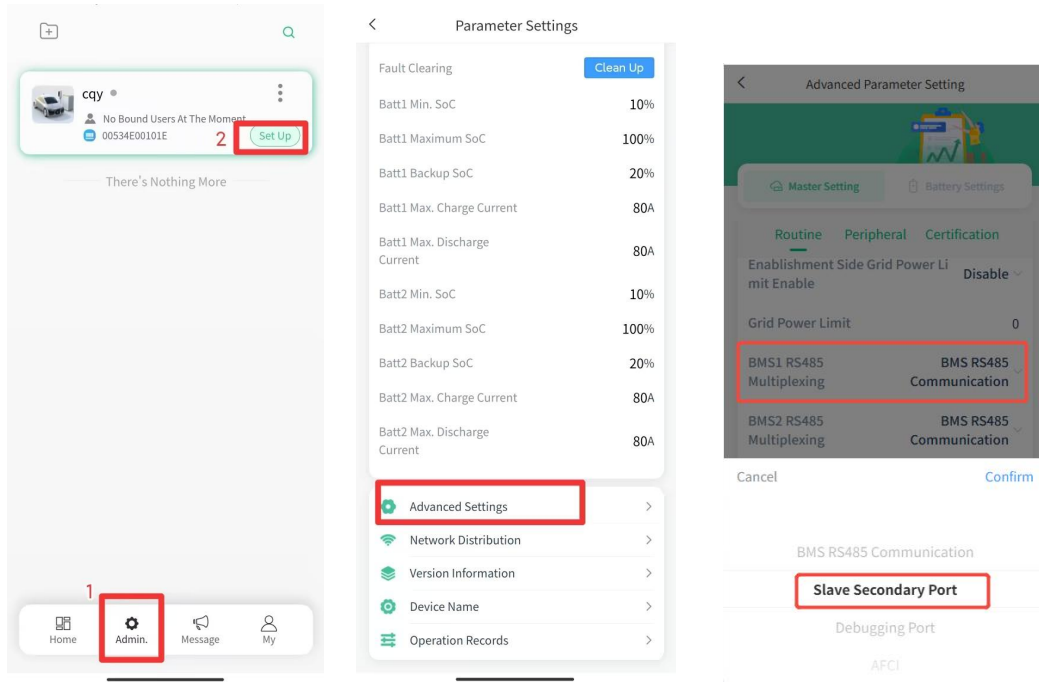
Connect the EMS to either BMS1 or BMS2. Let take BMS1 as an example. This interface is a multiplexed interface, where pin 1 and pin 2 are used to communicate with external EMS device, as shown below:

PIN	Color	Definition	Function	Note
1	Orange & White	RS485-A1-BMS	RS485 differential signal A1	BMS1 CAN port & EMS RS485 multiplex port
2	Orange	RS485-B1-BMS	RS485 differential signal B1	
3	/	/	/	
4	Blue	CANA-H1-BMS	CAN high level data	
5	Blue & White	CANA-L1-BMS	CAN low level data	
6-8	/	/	/	/

2. APP Settings

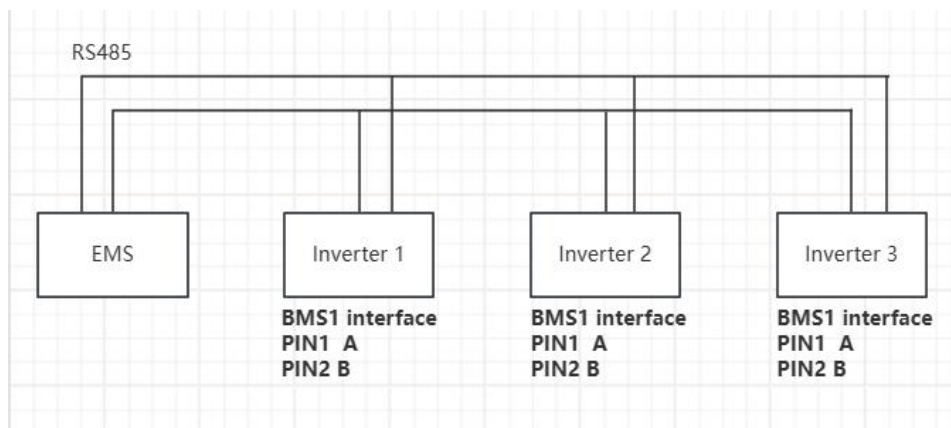
【Admin.】->【Set Up】->【Advanced Settings】->【Master Setting】->【Routine】

->【BMS1 RS485 Multiplexing】, select “Slave Secondary Port” .



3. EMS Control System for Multiple Inverters

During the communication process, the EMS (Energy Management System), acting as the master device, will issue parameters to all inverters or read data from all inverters in accordance with the open Modbus RTU protocol of the inverters. Let take three inverters as an example.



Please note the following settings

1. Baudrate 115200
2. Inverter 1 BMS1 RS485 Device address should be set to 1
3. Inverter 2 BMS1 RS485 Device address should be set to 2
4. Inverter 3 BMS1 RS485 Device address should be set to 3
5. ARM Version \geq V0002B01 (need to check with the manufacturer)

Advanced Parameter Setting

Master Setting Battery Settings

Routine Peripheral Certification

Stand-Alone/Parallel Stand-Alone

Professional Setting

Grid Unbalance Comp.	Enable
Output Voltage Coeff.	1
Inverter Power Limit	12kW
Output Derating Factor	1
Self Consumption Power Supply	From Battery
BMS1 RS485 Address	0
BMS2 RS485 Address	0