



HoyUltra

100kW/215kWh

EMS, PCS and Battery All-in-One

- Outdoor Liquid-cooling
- Supporting parallel connecting, maxi 10 units
- Supporting on/off grid switching, maxi 3 units







Front View



Back View

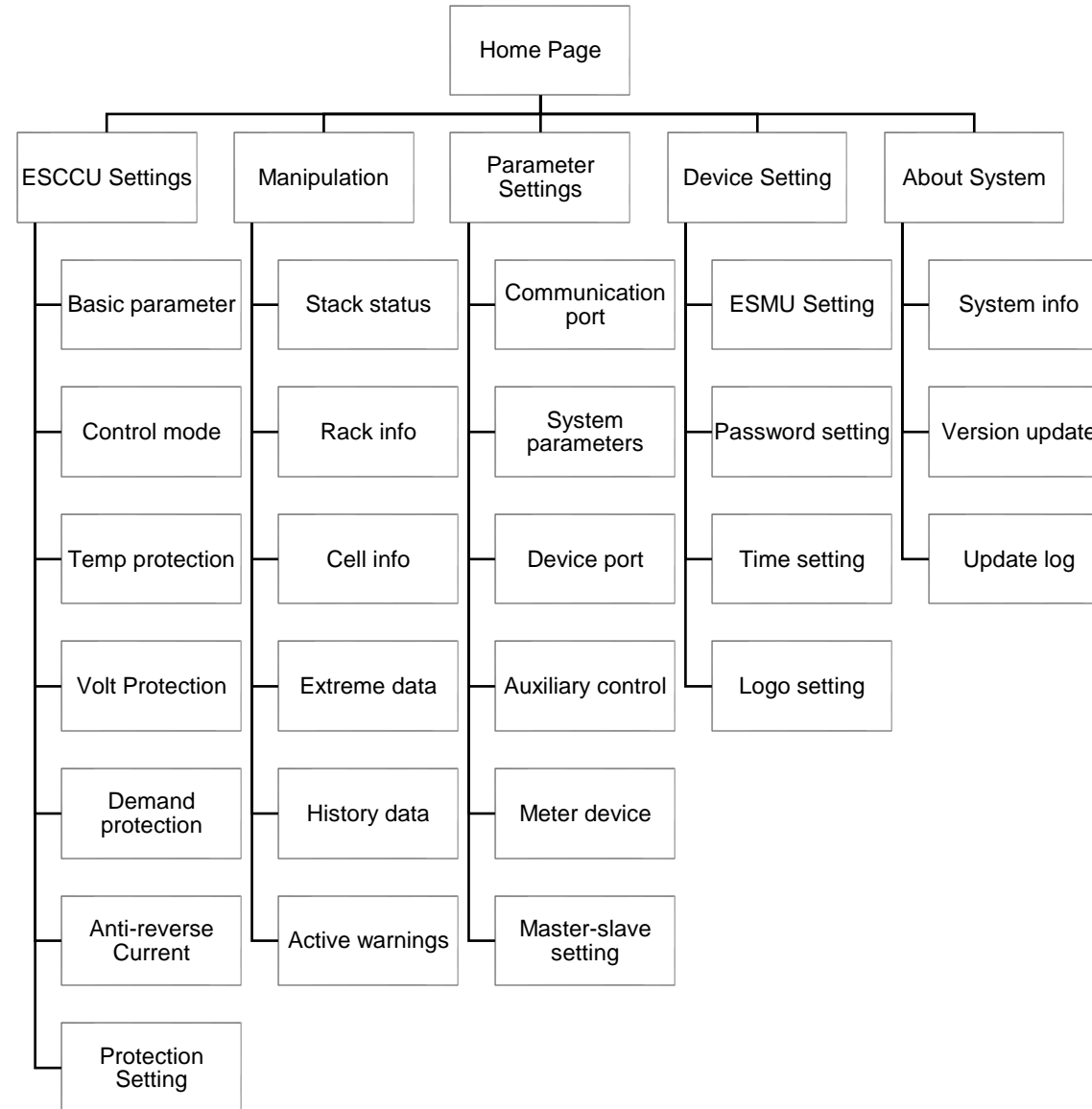
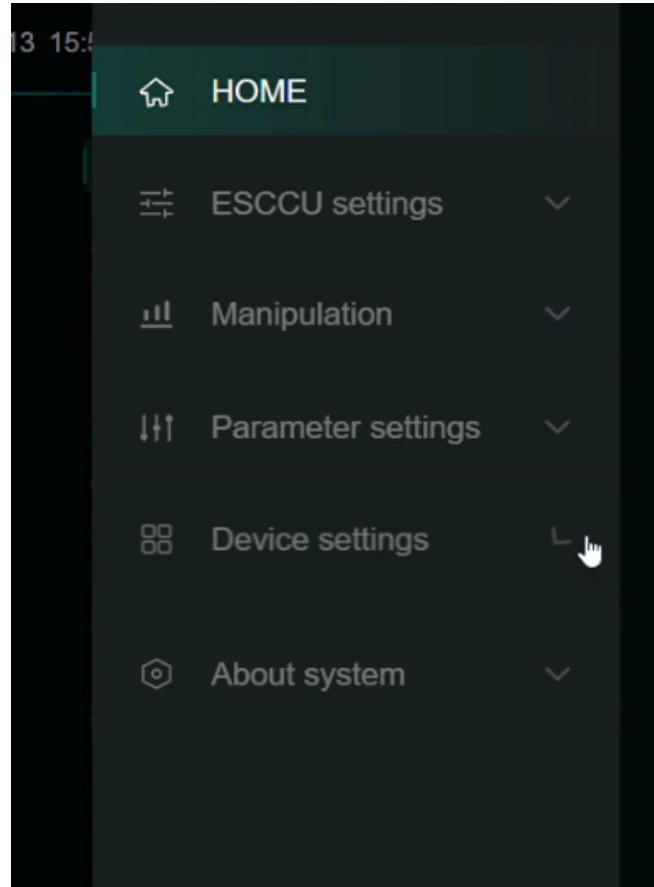


ESCCU(EMS), local application for HoyUltra



Home Page info:

- Multiple Stack System Status
- Power Curve
- Stack topology
- Meter Info
- Warning Info





Checking Information

Rack Info

Rack info Charge Discharge Standby Fault Rack topology

Rack info

- Rack Volt.: --
- Rack Curr.: --
- Rack SOC: --
- Rack SOH: --
- Insulation R+: --
- Insulation R-: --

Rack capacity info

- Avail. CHA Cap.: --
- Avail. DIS Cap.: --
- Single CHA Cap.: 0.00kWh
- Single DIS Cap.: 0.00kWh
- Daily CHA Cap.: 0.00kWh
- Daily DIS Cap.: 0.00kWh
- Total CHA Cap.: 0.00kWh
- Total DIS Cap.: 0.00kWh

Rack extreme info

- Max. Volt.: --
- Max. Volt.#: --
- Min. Volt.: --
- Min. Volt.#: --
- Max. Temp.: --
- Max. Temp.#: --
- Min. Temp.: --
- Min. Temp.#: --
- Max. SOC: --
- Max. SOC#: --
- Min. SOC: --
- Min. SOC#: --
- Max. SOH: --
- Max. SOH#: --
- Min. SOH: --
- Min. SOH#: --

Rack topology

Power off

Connect contactor

Fault reset

Warning info

- Communication warning**
BCM BMM
- Rack warning**
Rack OV-volt, Rack UN-volt, CHA OV-curr, DIS OV-curr, Rack LO-SOC, Rack HI-SOC, Rack LO-in...
- Cell warning**
Cell OV-volt, Cell UN-volt, CHA OV-te, DIS OV-te, CHA UN-te, DIS UN-te, Rack HI-SOC, Cell temp., Volt-diff. lar, HI-SOC, LO-SOC, SOC-diff.

← Return

Pack Info

Pack info Charge Discharge Standby Fault

Pack list All cells Cell diagram

PACK 1

- 0.0V
- 48# --
- 48# --
- 28# --
- 28# --

PACK 2

- 0.0V
- 48# --
- 48# --
- 28# --
- 28# --

PACK 3

- 0.0V
- 48# --
- 48# --
- 28# --
- 28# --

PACK 4

- 0.0V
- 48# --
- 48# --
- 28# --
- 28# --

PACK 5

- 0.0V
- 48# --
- 48# --
- 28# --
- 28# --

← Return

Cell Info

Cell Info Charge Discharge Standby Fault

Pack list All cells Cell diagram

No.	Volt	Temp	SOC	SOH	No.	Volt	Temp	SOC	SOH	No.	Volt	Temp	SOC	SOH
1	--	--	--	--	13	--	--	--	--	25	--	--	--	--
2	--	--	--	--	14	--	--	--	--	26	--	--	--	--
3	--	--	--	--	15	--	--	--	--	27	--	--	--	--
4	--	--	--	--	16	--	--	--	--	28	--	--	--	--
5	--	--	--	--	17	--	--	--	--	29	--	--	--	--
6	--	--	--	--	18	--	--	--	--	30	--	--	--	--
7	--	--	--	--	19	--	--	--	--	31	--	--	--	--
8	--	--	--	--	20	--	--	--	--	32	--	--	--	--
9	--	--	--	--	21	--	--	--	--	33	--	--	--	--
10	--	--	--	--	22	--	--	--	--	34	--	--	--	--
11	--	--	--	--	23	--	--	--	--	35	--	--	--	--
12	--	--	--	--	24	--	--	--	--	36	--	--	--	--

← Return

1 2 3 4 5 6 7 Total 240

Warning

Active warnings

Communication warning Stack warning Rack warning Cell warning Auxiliary control warning

Select (1)

No.	Rack#	Warning	Warning description	Warning date/time
1	Rack1	BCM comm. fault	BCM comm. fault	2023-10-25 17:25:33

← Return

1 Total 1



Communication setting: Menu→Parameter setting→Communication port

- Configure the right DNS address, IP address and Subnet mask of **PCS in eth1**
- Configure the right DNS address, IP address and Subnet mask of **PCS external communication in eth0**
- Configure the right DNS address, IP address and Subnet mask of **PCS in eth2**

The screenshot shows the 'Parameter settings' page for 'QingHe Project- Stack1'. The 'Communication port' tab is selected, and the 'eth1' port is highlighted with a red circle. The configuration fields are as follows:

Field	Value
DNS address:	114.114.114.114
IP address:	192.168.102.49
Subnet mask:	255.255.255.0
Default gateway :	Please input
MAC address:	f0:22:1d:a0:82:ba

At the bottom of the page, there are buttons for 'Return to Home', 'Reset', and 'Confirm'.



Meter setting: Menu→Parameter setting→Communication port →Meter device

- Configure the Meter address of Metering meter in **Electrical meter0**
- Configure the Meter address of Anti-reverse meter in **Electrical meter1** (if custom requires it)

Parameter settings

Communication port System parameters Device port Auxiliary control **Meter device** Master-slave setting

Electrical meter0 Electrical meter1

Meter type: Measuring meter

Meter address: 0 50 52 7 25 2

Device address: 1

Device port: 1

PT: 1

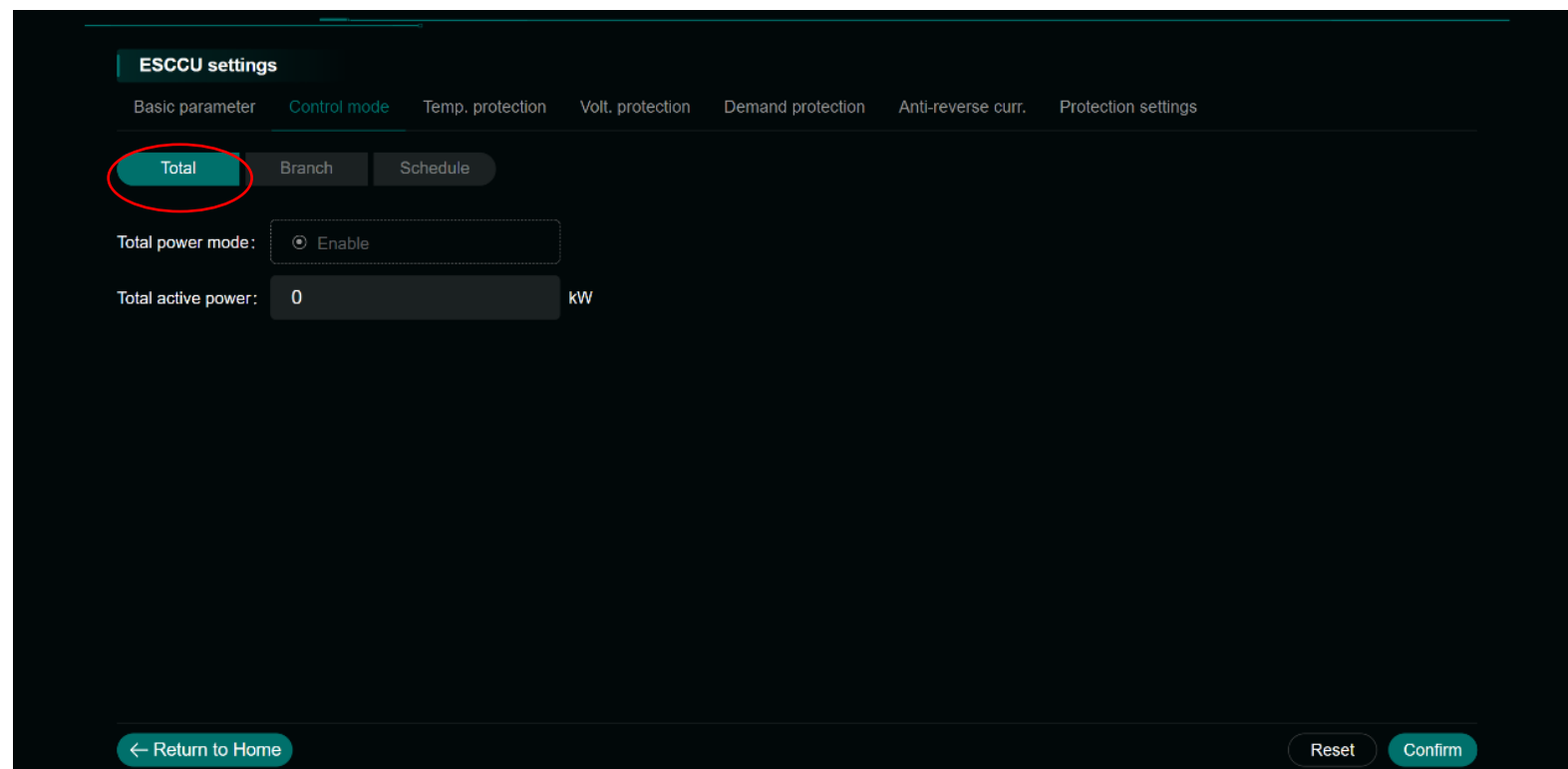
CT: 120

← Return to Home Reset Confirm

Charging/Discharging setting: Menu→ESCCU setting→Control mode

1. Total power setting

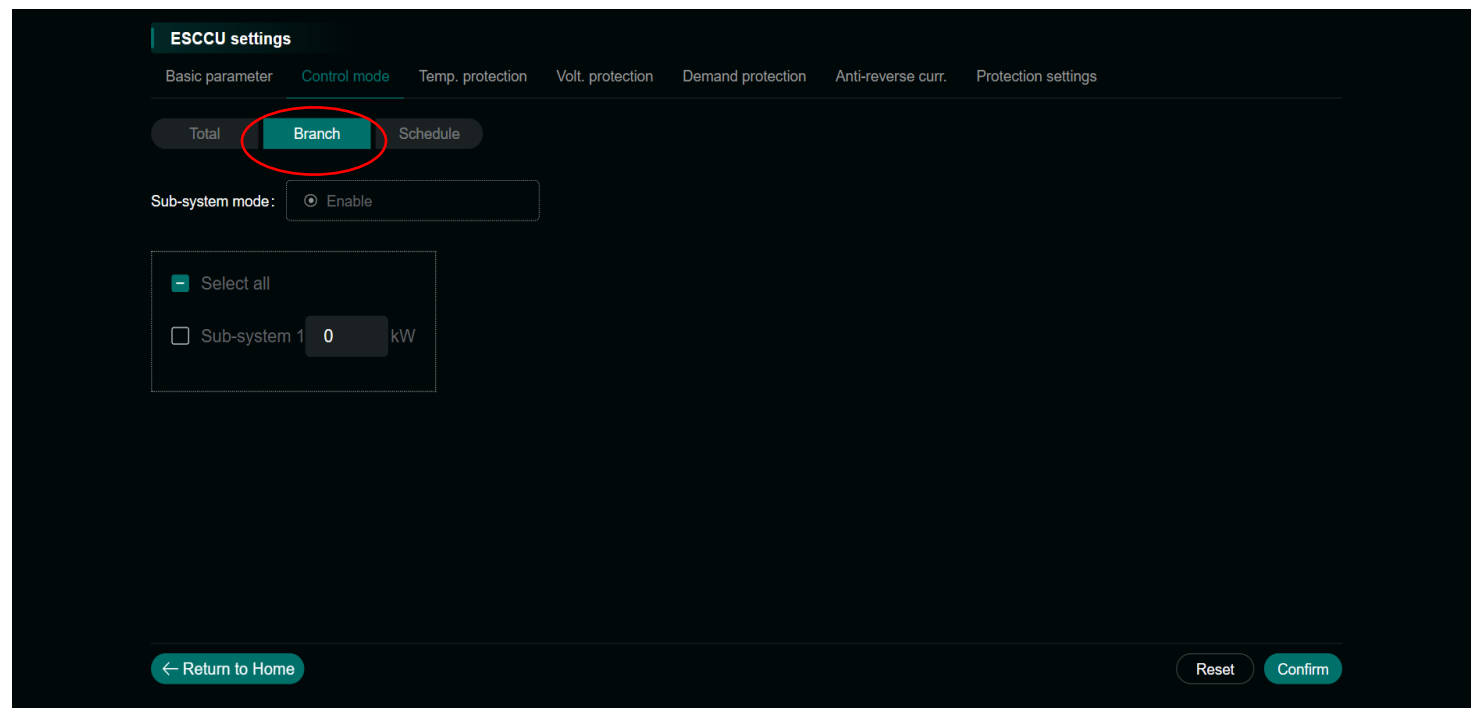
- The power is evenly distributed when multiple stacks are paralleled.
- When the power input a **positive** value, it is set to discharge.
- When it input a **negative** value, it is set to charge.
- After setting is completed, click “Confirm” to issue the power control to PCS.



Charging/Discharging setting: Menu→ESCCU setting→Control mode

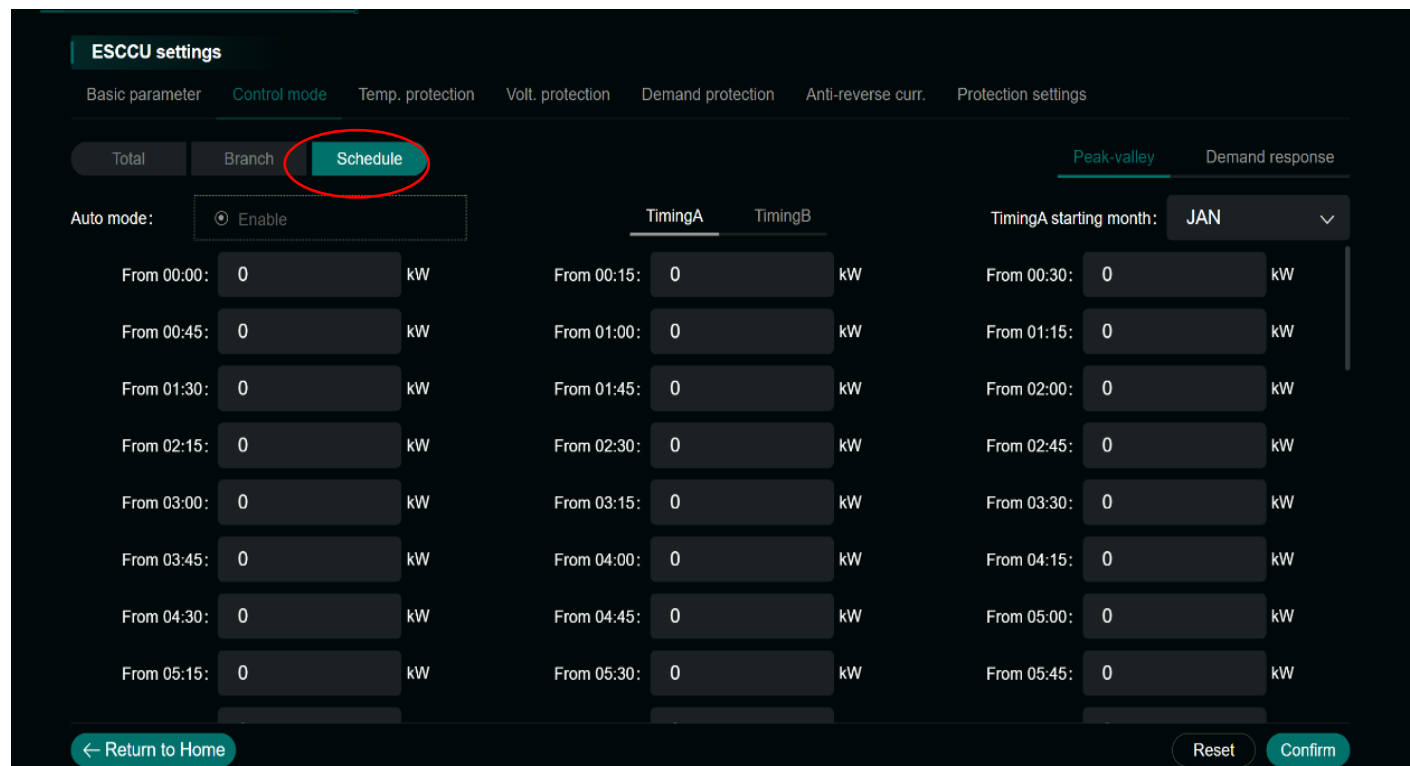
2. Subsystem

- This step is not required for single cabinet system, but it is required for multiple cabinets.
- Individual rack can be configured to charge or discharge. When the power is set to a positive value, it is set to discharge.
- When it is set to a negative value, it is set to charge.
- After setting is completed, click “Confirm” to issue the power control to PCS.



3. Schedule Setting

- Set the required charging and discharging power according to the period and plan.
- It is suitable for long-term fixed charging and discharging requirements.



The screenshot displays the 'ESCCU settings' interface. At the top, there are navigation tabs: 'Basic parameter', 'Control mode', 'Temp. protection', 'Volt. protection', 'Demand protection', 'Anti-reverse curr.', and 'Protection settings'. Under 'Control mode', there are sub-tabs: 'Total', 'Branch', and 'Schedule' (which is highlighted with a red circle). Below these are 'Peak-valley' and 'Demand response' options. The 'Auto mode' is set to 'Enable'. The main area is divided into three columns: 'TimingA', 'TimingB', and 'TimingA starting month: JAN'. Each column contains a list of time intervals with corresponding power values (all set to 0 kW). At the bottom, there are buttons for 'Return to Home', 'Reset', and 'Confirm'.

TimingA	TimingB	TimingA starting month: JAN
From 00:00: 0 kW	From 00:15: 0 kW	From 00:30: 0 kW
From 00:45: 0 kW	From 01:00: 0 kW	From 01:15: 0 kW
From 01:30: 0 kW	From 01:45: 0 kW	From 02:00: 0 kW
From 02:15: 0 kW	From 02:30: 0 kW	From 02:45: 0 kW
From 03:00: 0 kW	From 03:15: 0 kW	From 03:30: 0 kW
From 03:45: 0 kW	From 04:00: 0 kW	From 04:15: 0 kW
From 04:30: 0 kW	From 04:45: 0 kW	From 05:00: 0 kW
From 05:15: 0 kW	From 05:30: 0 kW	From 05:45: 0 kW