

SOLAR HUB MONITOR

User Manual



SUPPORT

If you are experiencing technical problems and cannot find a solution in this manual, please contact ECO-WORTHY for further assistance.

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1.Introduction

The Hub Monitor can display information of charge controller and inverter collected by the hub. It allows users to check the connection, main parameters and fault details of the device. Historical data can also be stored and searched. Users can easily manage device with the Hub Monitor.

2.Features

- 1.Touchable 5-inch screen with up to 800×480 pixels of resolution
- 2.Adjustable 10 brightness levels backlight withstands at most 20,000 working hours(10,000 when continuously working at 100% brightness)
- 3.Built-in supercapacitor supplies power and stores data for 15 days when the monitor loses electricity
- 4.Cat 6e Ethernet Shielded cable allows perfect working even under high temperature

3.Installation Guide

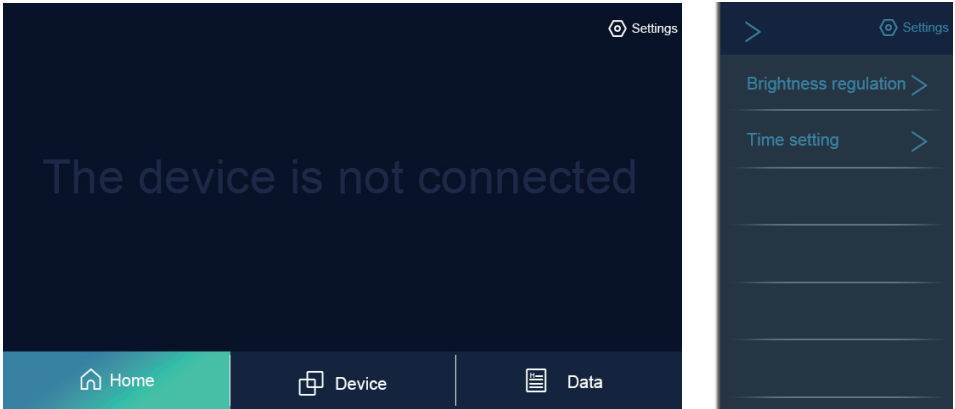


1. Connect the hub to the port with Cat 6e Ethernet cable
- 2.Turn on the monitor when connection is done, the green power indicator will be always on; when the hub is connected, the yellow communication indicator will flash.

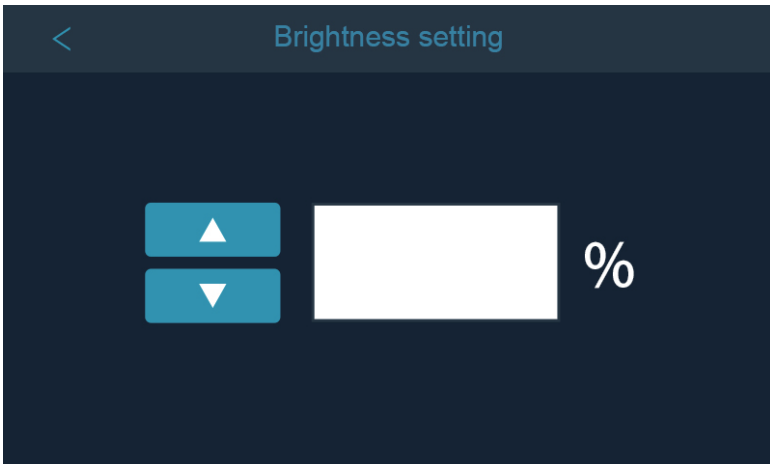
4. User Guide

1. Settings

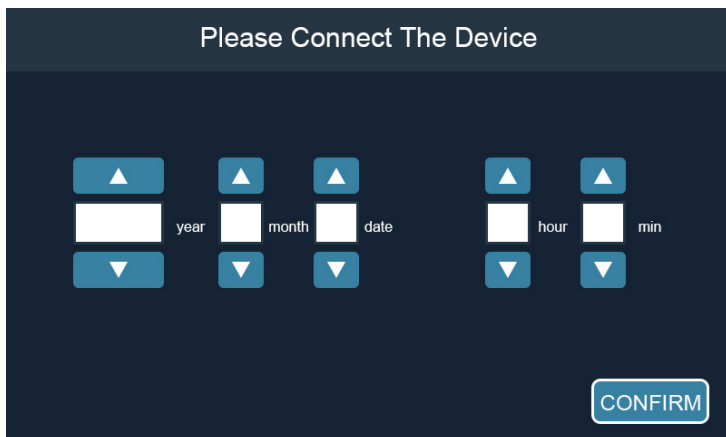
Set up the display in different situations. Tap the Settings icon in the top right and change the brightness or time setting in the drop-down menu.



1.1 Press the up and down button to set expected brightness in Brightness regulation.



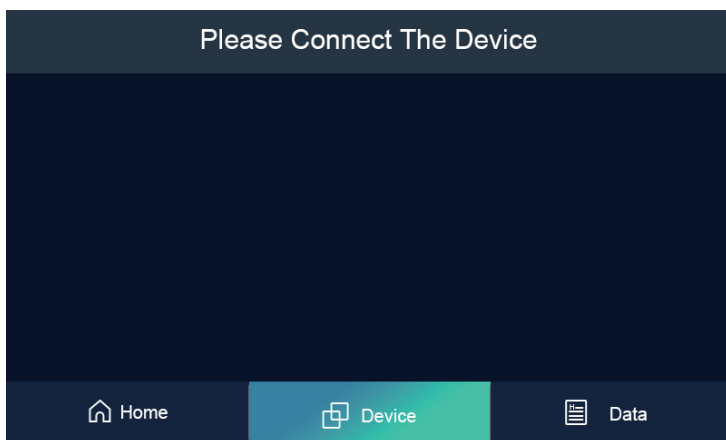
1.2 Press and hold the direction button to continuously alter the date or time in Time setting



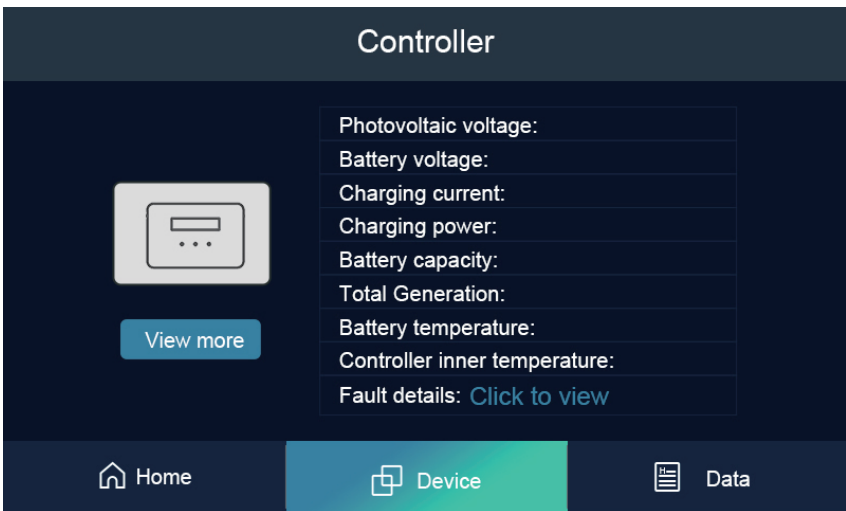
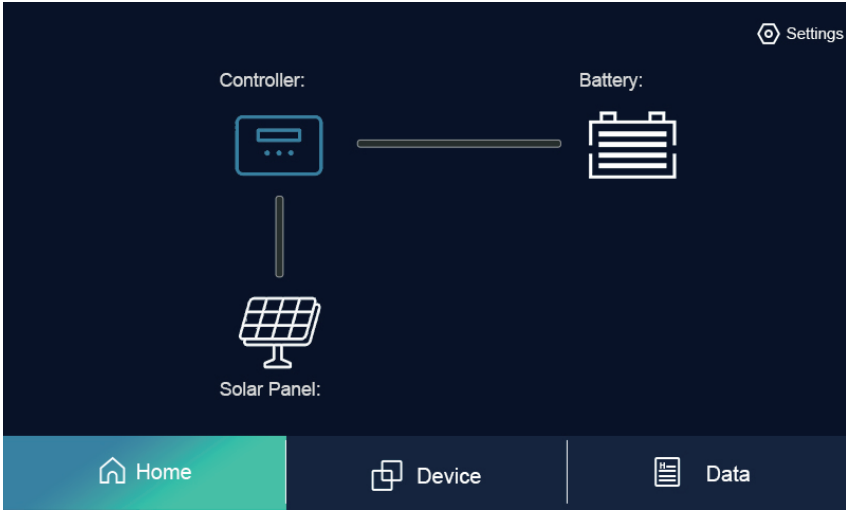
2. Dashboard on the home page

When a new device is connected to the Hub, the screen will jump to corresponding home page with dashboard. The dashboard will differ when different device is connected.

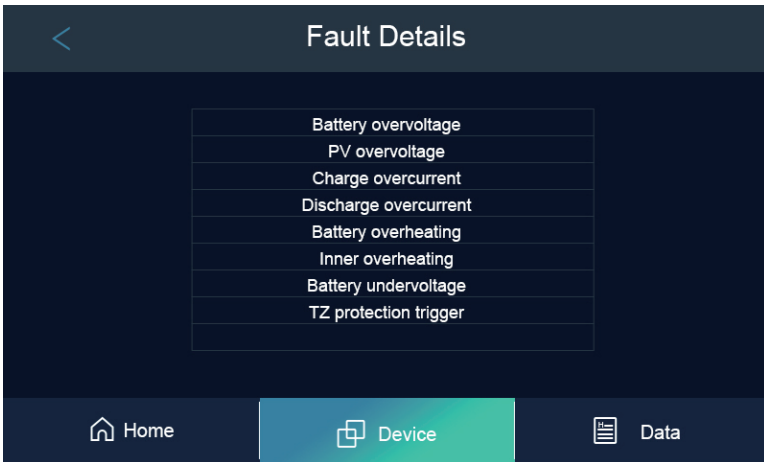
2.1 The Device page will be blank when no device is connected. In this case, the screen won't show any fault and only the settings of brightness and date are available.



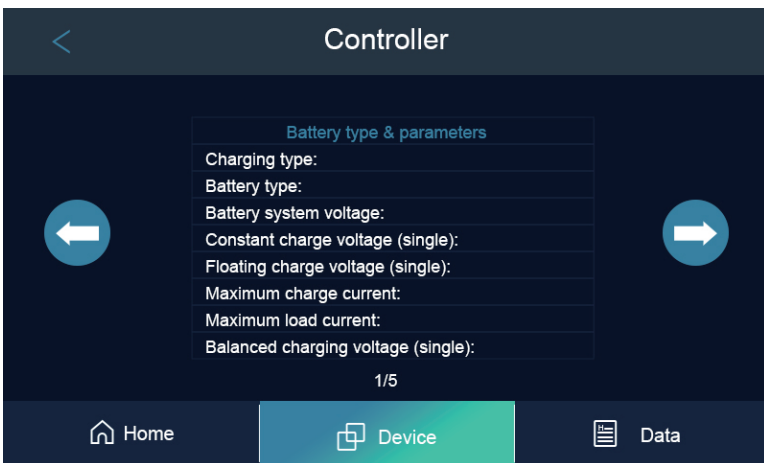
2.2 The icons of Solar Panel→Controller→Battery will occur on the dashboard when only a controller is connected. The charging current, charging efficiency and battery SOC will be listed on the dashboard. By tapping the controller icon, the main parameters of the controller will be shown.



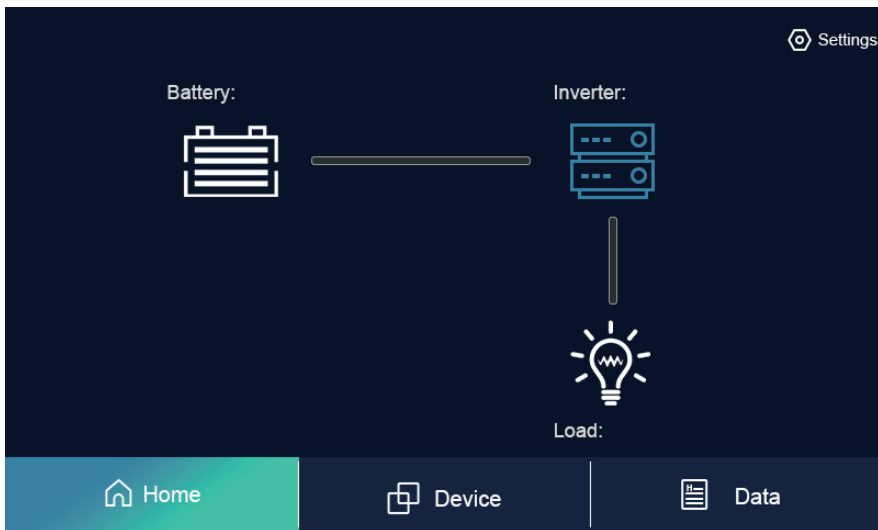
2.2.1 Main parameters can be checked on the Device page. Press Click to view to check if there is any fault with the current device.




2.2.2 Press View more to check more details about the device. Flip over the page with the direction buttons.



2.3 The icons of Battery→Inverter→Load will occur on the dashboard when only an inverter is connected. The battery SOC, output power and load wattage will be listed on the dashboard. By tapping the inverter icon, the main parameters of the inverter will be shown.



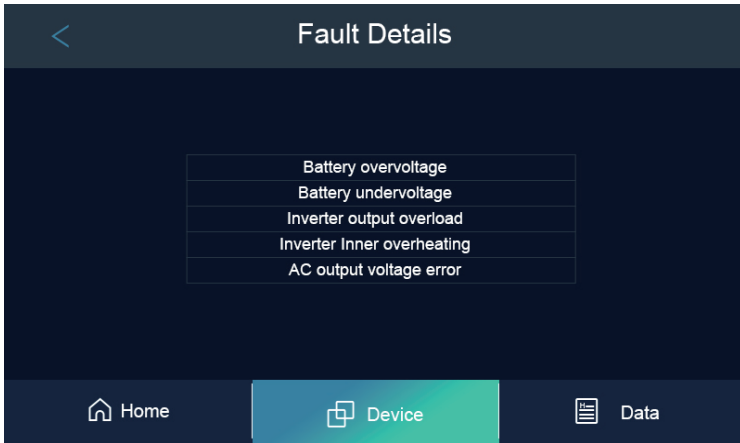
Inverter



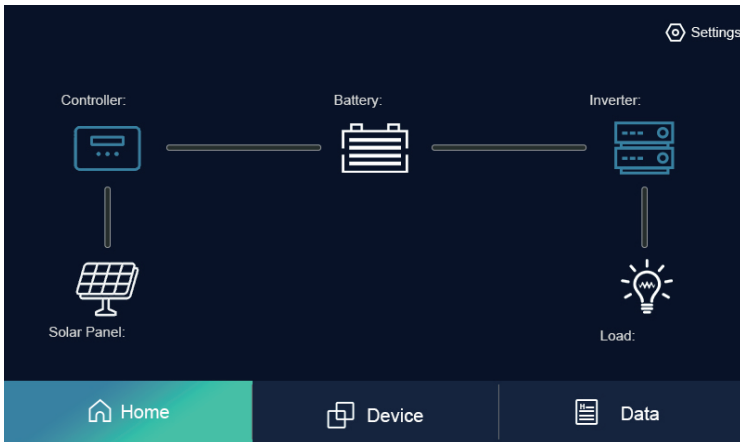
| |
|----------------------------------------------|
| Battery input voltage: |
| AC output frequency: |
| Inverter input voltage system: |
| AC output voltage: |
| AC output current: |
| Output power: |
| Inverter Inner temperature: |
| Inverter output switch mode: |
| Fault details: Click to view |

Home
Device
Data

2.3.1 Main parameters can be checked on the Device page. Press Click to view to check if there is any fault with the current device. Flip over the page with the direction buttons.



2.4 The icons of Solar Panel→Contoller→Battery→inverter→Load will occur on the dashboard when both inverter and charge controller are connected. The charging current, charging efficiency, battery SOC, output power and load wattage will be listed on the dashboard. By tapping the controller or the inverter icon, the main parameters of the two will be shown on each page. The rest of the operations are the same as above.



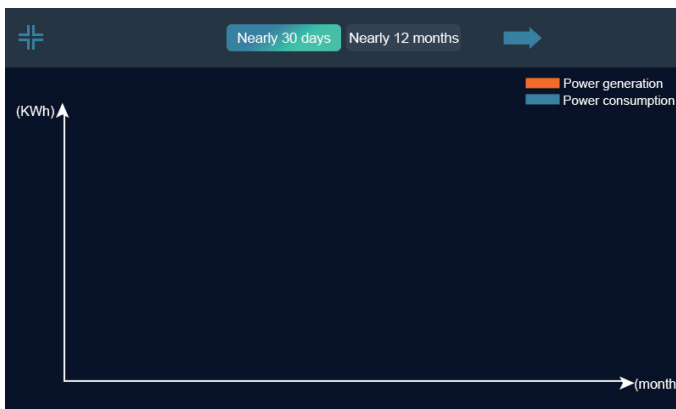
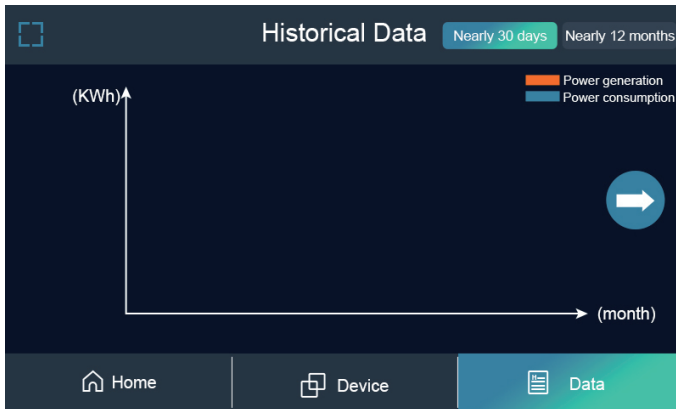
2.5 Historical Data

This page includes Nearly 30 days, Nearly 12 months, Full screen button and historical data of power generation. The data is shown by bar graph. Flip over the page with the direction buttons.

1.The Nearly 30 days historical data suggests the daily power generation counted in latest 30 days.

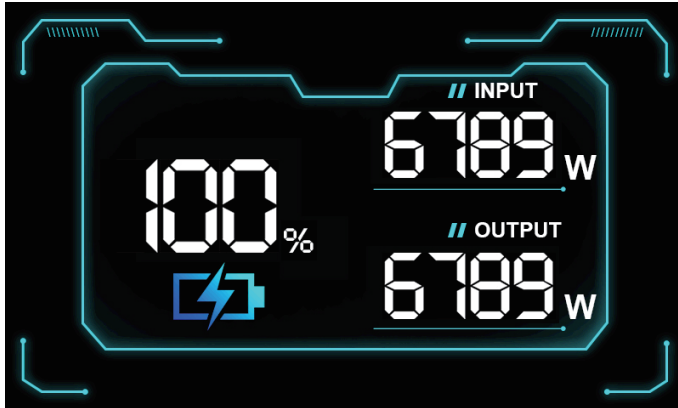
2.The Nearly 12 months historical data suggests the monthly power generation counted in latest 12 months.

3.Click Full screen button to check more bar graphs.



2.6 AOD (always-on display)

The Monitor will show this page when no operation is done for over 15 mins.



5.Product

1. Specifications

| | |
|--------------------------|----------------------------------|
| Screen Size (resolution) | 5 inch (800*480) |
| Screen Type | Single-touch Capacitive Screen |
| Rated Power | 5W±10% |
| Operating Voltage | 5V±10% |
| Operating Current | 100mA-300mA |
| Port Type | RJ45 |
| Size | 175*111.3*28.5mm/6.9*4.4*1.1inch |
| Weight | 315g/0.69lbs |

2. What's in the box

| | | |
|-----------|---------------------------------------------|---|
| Monitor | | 1 |
| Net Cable | Cat 6e Ethernet Shielded cable, 8*24AWG, 3m | 1 |
| Screw | Diameter 4mm | 4 |

6.Troubleshooting

| Fault | Cause | Measures | Solution |
|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| Screen won't lit up | The hub is not working | Check if the green indicator on the port will be always on after power is connected. If it will, the monitor shall be faulty; | Reconnection or replacement of the hub |
| | Wrong wiring between the monitor and the hub | If the indicator won't lit up, it means the hub is not working or the wiring between the monitor and the hub is incorrect. | Reconnect the monitor and the hub |
| | Faulty monitor | | Replace the monitor |
| No reaction from the screen after a device is connected; get stuck in No Device page | The connected device (charge controller, inverter,etc.) is not from Eco-worthy | 1.Check if the yellow indicator on the port will flash after power is connected. If it will, the monitor shall be faulty or the connected device is not from Eco-worthy; | Change the device |
| | Wrong wiring between the monitor and the hub | | Reconnect the monitor and the hub |
| | Faulty monitor | 2.If the indicator won't flash, it means the wiring between the monitor and the hub is incorrect or the monitor is faulty | Replace the monitor |

7.Safety precautions

- 1) No beating, stomping or other similar actions on the screen, otherwise its lifespan and performance will be affected.
- 2) No attempt to open or fix the screen in case of electric shock or device damage.
- 3) Keep the monitor at somewhere dried, cool and ventilated when it is no longer in use. Keep it away from direct sunlight.
- 4) If the time on the screen is not the same as local time, it means the monitor is off for a long time and the power of the supercapacitor drains out. Reconnect power, turn it on and set up time, the monitor will work correctly.