

# The user manual for iPower

## 1. Preparation

Using a USB data cable to connect the inverter to the pc, and then powering on the inverter, waiting for the inverter to be started. The screen lights up and displays the interface as shown in the figure below.

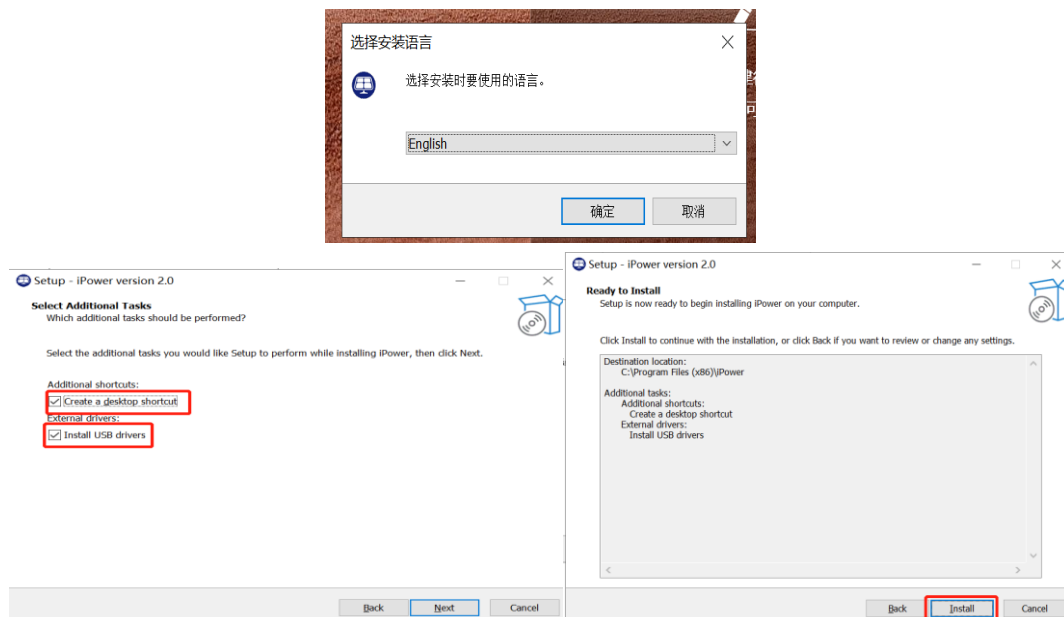


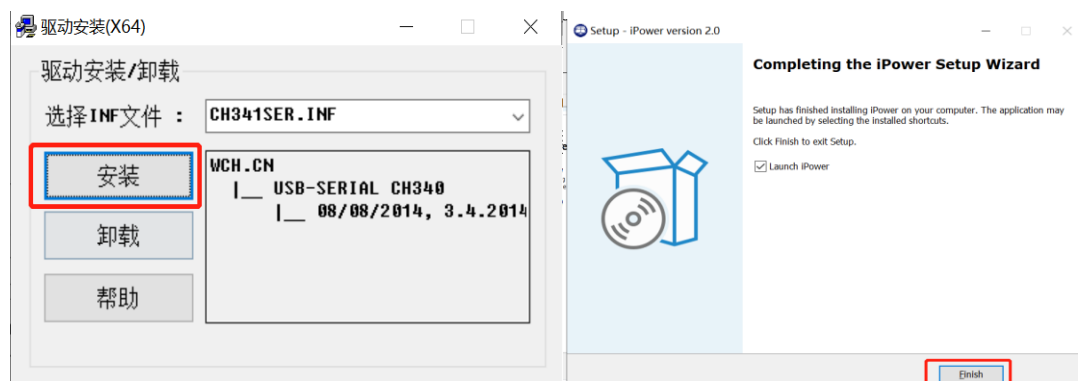
## 2. Install the software of iPower

### 2.1 Windows OS

Double-click the file of iPower-installer.exe, and then start to installing the software. Please follow the following steps to install it.

If you install software at the first time, please check the option of "Install USB drivers".

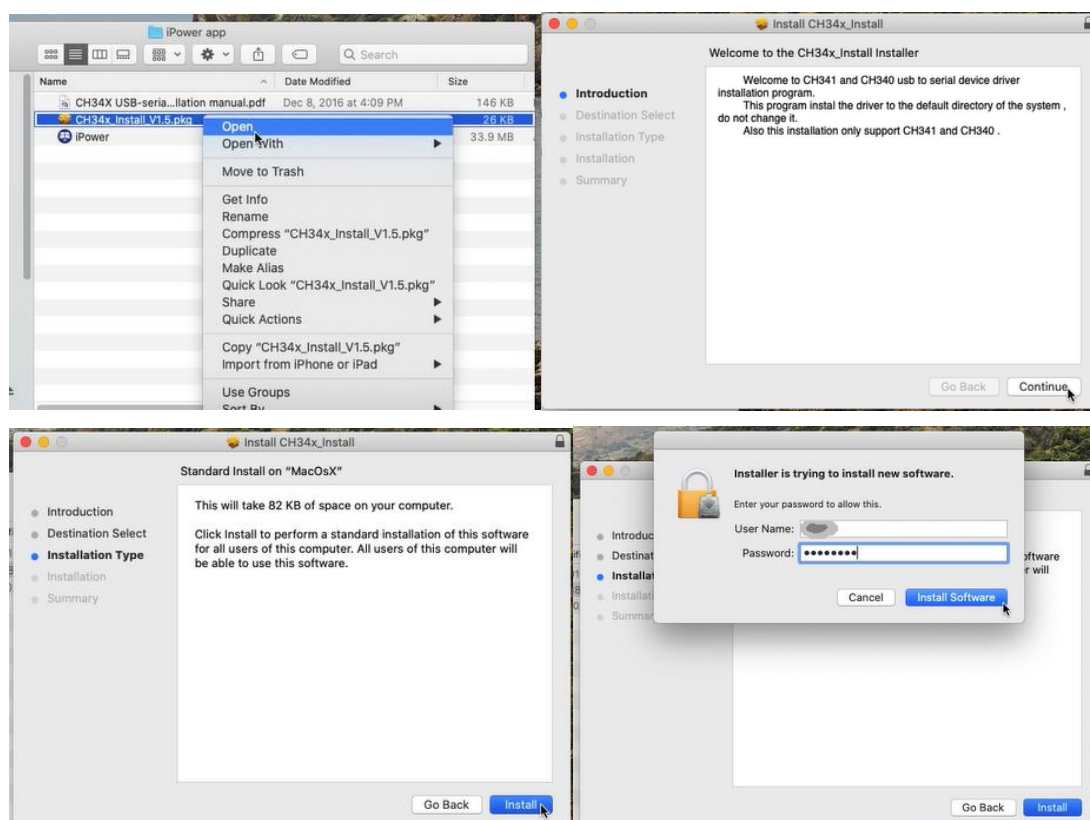


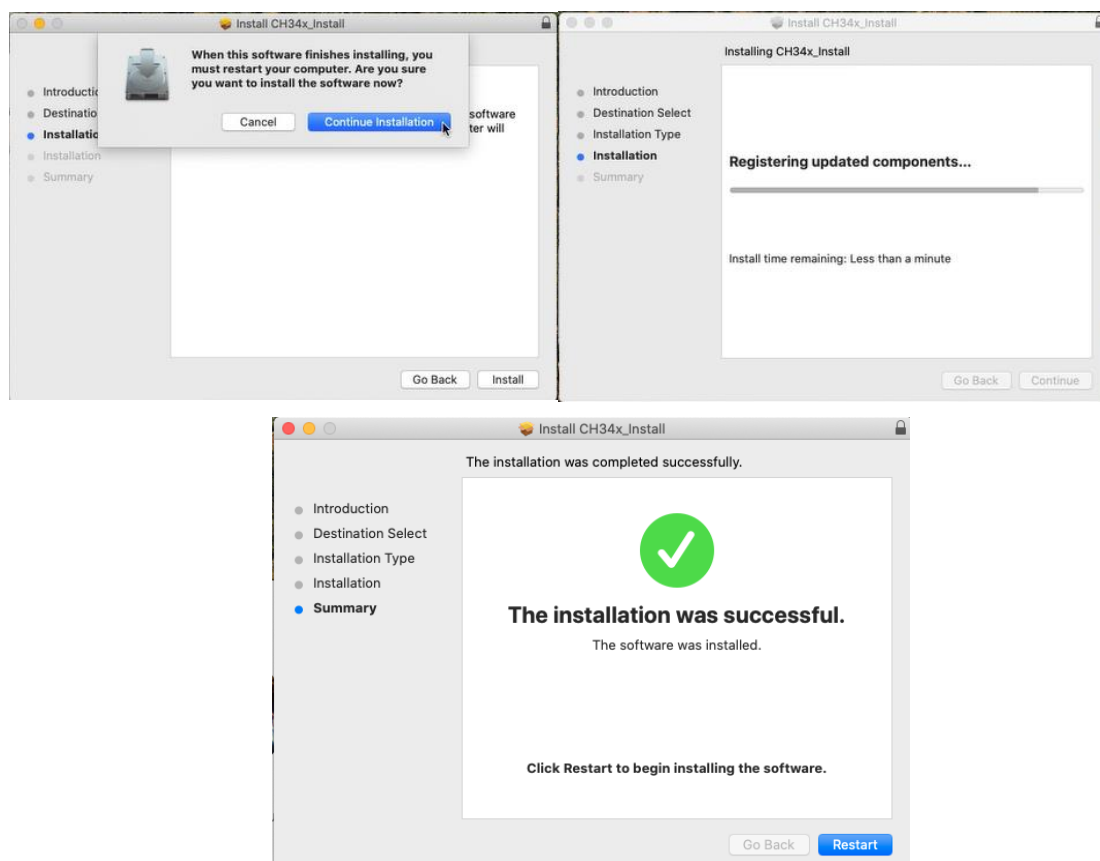


## 2.2 Mac OS

Copy the application software package <iPower.app.zip> to your Mac computer. Double-click the software package, the system automatically decompresses and generates the application software icon iPower and USB driver package.

Double-click <CH34x\_install\_V1.5.pkg> to install the USB driver. The installation process is shown in the figure, or you can read the file <CH34x USB-serial driver installation manual.pdf>, after the installation, restart the system. Then, You can double-click iPower to open the monitoring software.





### 3. the setting of communcation

1) Double-click and then open the iPower software, click the drop-down list of "Comm port" on the left side of the interface, and select the correct serial number. In Windows OS, select "COMx", In MAC OS, select "tty. wchusbseial1440".

2) Click the "open comm" switch button to open the serial port communication.

3) Set the range of the Scan adress,if you connect only one inverter,pls select the 1 as the "start adress" and "end adress".

If there are not only one inverters connected via RS485 cable, please make sure that the RS485 communication address of each inverter is the same. The communication address of the device can be set through the device screen menu (setting item:30). Generally, the communication address of the device starts from 1, and the communication address of each inverter increases sequentially. Then the "Start Address" of the monitoring software is set to 1, and the "End Address" is set to the communication address with the largest value.

4) Click the button of "search device",and then scan the device.The address in the left sidebar corresponds to each device scanned. If the device communicates successfully, the indicator corresponding to "address:xx" will turn green, otherwise it will turn orange.

5) The serial port settings and communication data on the communication setting page are used for debugging and usually do not need to be modified.



## 4. MAIN PAGE

The main page is divided into eight display areas, as shown in the picture below.

### 1) Page switch button area

Switch to the corresponding page by clicking the button, including the following page.

- ◆ **Main page:** This page mainly monitors the real-time information and status of the device.
- ◆ **STATISTICS:** It mainly displays the power statistics and graph display of the last 7 days.
- ◆ **HISTORY:** It displays historical fault information.
- ◆ **COMMUNICATION:** In this page, you can configure the communication parameter of serial port. By default, there is no need to change the settings here.
- ◆ **CONFIGURE:** You can configure the parameter of the device. This page is used to set the parameters of the inverter device.
- ◆ **FIRMWARE:** It is used for the upgrading of inverter firmware.
- ◆ **HELP:** You can open the help file.
- ◆ **Chinese/EN:** Click this button, you can switch the Language.



## 2) The display area of device address group

This area displays the address list of all devices. In the initial state, the device address is displayed in the "Stand-alone". When the software communicates with the device successfully, the software reads the relevant information of the device and judges whether the device is parallel machine or split-phase based on this information. if the device is parallel or split-phase device, move the address of the device to the corresponding group for display.

Click on a device address in the address list, and the data display area on the right will immediately update and display the data of the selected device.

## 3) The display area of communication setting

Please refer to the description in Chapter 3 above.

## 4) The display area of device real-time data

The real-time data display area of the equipment, it mainly displays real-time data such as voltage, current, and power of the PV side, battery side, mains side and load side. In addition, click the inverter device icon to display device-related information, such as software version, serial number, and rated power.

## 5) The display area of device status

It mainly displays the internal status information of the inverter device, such as the temperature of device, the status of running, the priority of output.

## 6) The display area of device power

It displays the overview information of the device electric quantity, including photovoltaic accumulative energy, photovoltaic energy of the day, load accumulative electricity consumption, and load electricity consumption of the day.

### 7) The curve display of device data between 24H

It mainly display curve ,including the power of load,the power of PV,the surplus capacity of battery and the current of battery.The record usually is 24H.

If you click the "Export data" button to export the data of all curves.

### 8) The display area of alarm fault

At the bottom of the page,it will display the alarm and fault.The fault code and fault name are displayed. When multiple alarms or faults occur, the fault information is displayed in a rolling manner.

## 5 STATISTICS

The statistics page is divided into three areas, the selection of power statistics objects, the display area of the historical power state graph, and the power statistics information area.

Electricity statistics record the daily power generation and electricity consumption of the last 7 days. The statistical objects include the following:

- ◆ PV energy
- ◆ Battery charge energy
- ◆ Battery discharge energy
- ◆ Line charge energy
- ◆ Load consum energy
- ◆ Load consum energy from line

## 6 HISTORY

It mainly display the information of the historic fault,including the fault code,fault name,and the time when the fault occurs,the fault message.Read the historical fault information by clicking the "Refresh" button at the bottom.

## 7 CONFIGURE

- 1) The setting parameter corresponds to the parameter number in the device user manual or the device screen

On the parameter setting page, hover the mouse over the parameter name, and a serial number prompt will be displayed next to the mouse. The serial number prompt is the parameter serial number in the device user manual, that is, the parameter serial number displayed on the device screen, as shown in the figure below.

**Battery parameter**

Turn to mains volt: 11.5 4	Turn to inverter volt: 9.0
Battery boost charge time: 120	Battery floating charge voltage: 14.0

- 2) Read device parameters in batches  
Click the "Get all parameters" button at the bottom of the interface.
- 3) Read the parameters of a single device  
First use the mouse to select the parameter that needs to be read, and then click the "Read" button at the bottom of the interface.
- 4) Set the parameters of a single device  
Modify the value of the parameter first, and then click the "write" button at the bottom of the interface.
- 5) Export device parameters in batches  
Click "Get all parameters", read and update the device parameters in batches, and then click the "Export Parameters" button to save all the parameter values of the current device to an excel file.
- 6) Please refer to the user manual for the setting instructions of specific parameters.

## 8 FIRMWARE

- 1) Close the current communication serial port  
Before upgrading the firmware, you must close the current communication serial port of the software in the left sidebar, and at the same time ensure that the current PC computer is only point-to-point connected with the device that needs to be upgraded.
- 2) Open the firmware upgrade interface  
Click the firmware upgrade button to open the firmware upgrade interface, as shown in the following window. In the firmware upgrade interface, select the corresponding serial port number, and then click the "Select Firmware" button to select the upgrade file (.bin).
- 3) Upgrade firmware  
When the machine is powered on, click the "Upgrade" button to start the upgrade. After the upgrade is successful, the progress bar shows 100%.
- 4) Re-upgrade  
If the upgrade fails, you can upgrade the firmware again through the following steps.
  - a) Turn off the rocker switch on the device, then disconnect the battery, photovoltaic, and mains power of the device to completely power off the device.
  - b) Click the "Clear" button of the firmware upgrade software.
  - c) Connect the battery to the device, turn on the rocker switch, and then click the "Upgrade" button of the firmware upgrade software within 3 seconds to re-enter the firmware upgrade.

Firmware upgrade tool

Language

☐ Chinese

☒ English

comm port

1

baudrate

9600

firmware type

Normal firmware

upgrade baud

9600

file source

Local .bin file

rs485 address

1

2

Select firmware

3

Upgrade

Cancel

Clear

progress

0%

[2021-09-27 17:59:36] Can not find serial port !