

Hybrid Inverter Firmware Update Instruction via a Laptop

1. Overview:

To make the hybrid inverter compatible with more recent batteries in the market, the hybrid inverters may need upgrade the firmware. This document introduces the procedure for the firmware upgrade via a laptop.

2. Preparation

2.1 Firmware download

Please download the firmware upgrade kits via the link from the email sent by Sungrow service team.



Figure 1 Firmware upgrade files

2.2 SolarInfo Device Manager setup

2.2.1 Software installation

Open the SolarInfo Device Manager and double click the program software highlighted with the red circle (it is only supported by Chinese version currently, but setup is as follow).

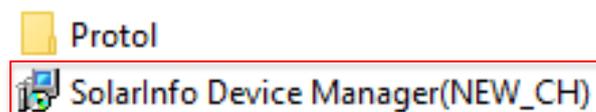


Figure 2 SolarInfo Device Manager

Click 'Next (N) 【下一步(N)】', which is on the bottom right corner (in the red circle)

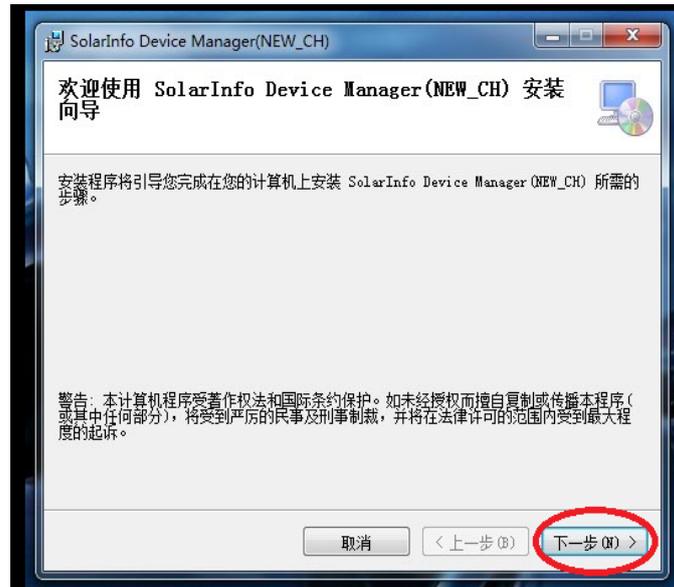


Figure 3 Introduction and Next

Click the 'Browse (R) 【浏览 (R)】' in the blue circle to select the installation place and then click 'Next (N) 【下一步(N)】' in the red circle

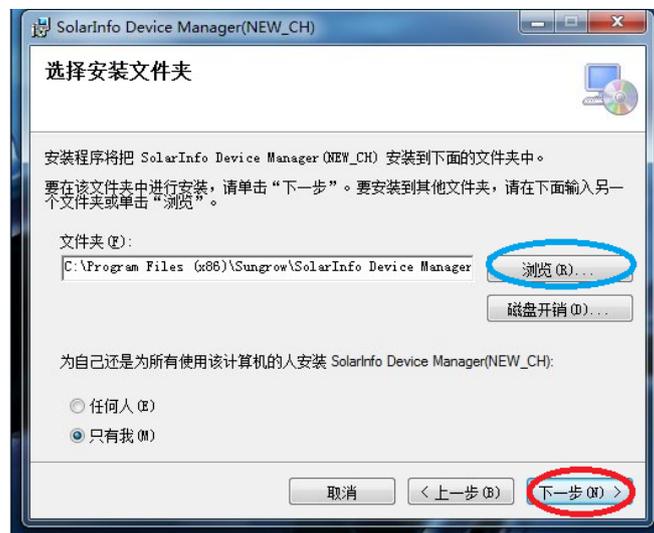


Figure 4 Select the installation location

Click 'Next (N) 【下一步(N)】' in the red circle and start the installation



Figure 5 Installation confirmation

Then it will take a few minutes to finish the installation. When you see the window in **Error! Reference source not found.**, click 'Close (C) 【关闭(C)】' in the red circle in the bottom right corner of the window to finish the program installation



Figure 6 Installation completed

2.2.2 Software settings

When the installation completes, there will be a shortcut on the desktop like the figure, right click to select the **Properties**

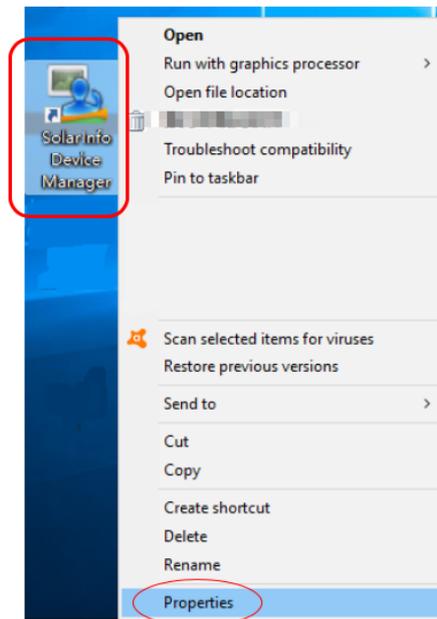


Figure 7 Select properties

Copy the file location as the red circle from Figure 8, then open the research, and paste the information search bar (Figure 9) to find the Protal folder.

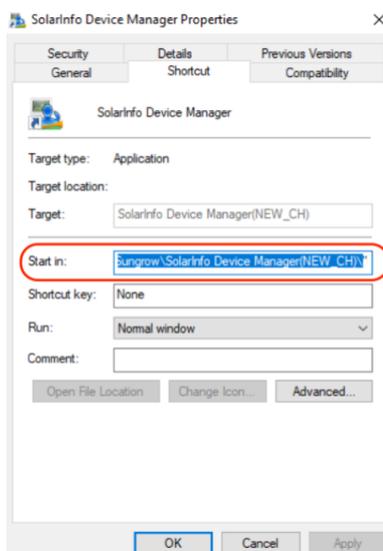


Figure 10 Copy file location

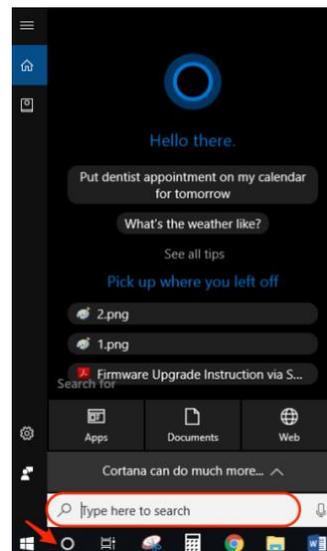


Figure 11 How to search the file

Then you can copy all files in the new **Protol folder** in the downloaded content to replace them in the original **Protol folder** (Figure 10)

Note: you must complete this step, otherwise, you may have some issues to setup the software.

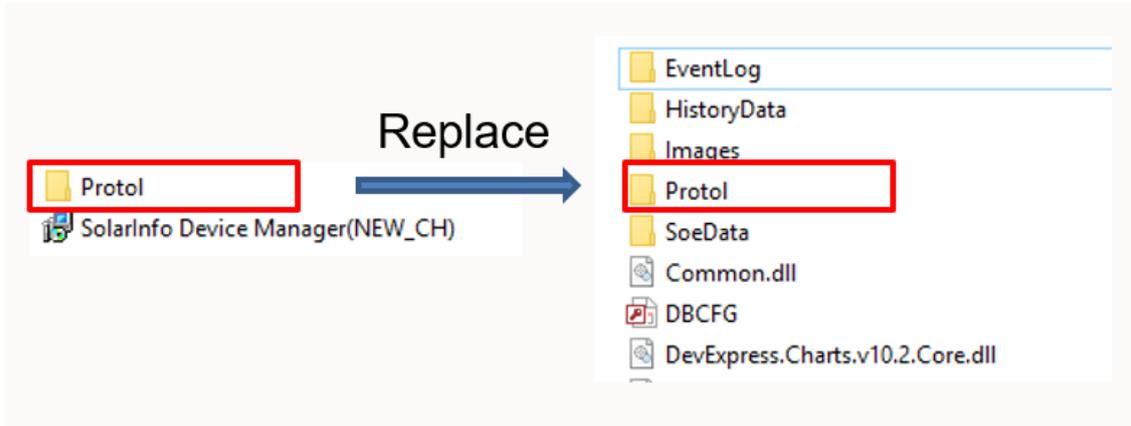


Figure 12 Replace Protol folder

2.3 IP settings on the inverter and the laptop

2.3.1 Inverter IP setting

Long press the 'ENT' button to the menu, enter the 'ON/OFF' settings and select 'OFF' to key stop the inverter



Figure 13 Key stop the inverter

After that, select the 'Settings' and enter the password 111. Then find the option 'Comm. Param'

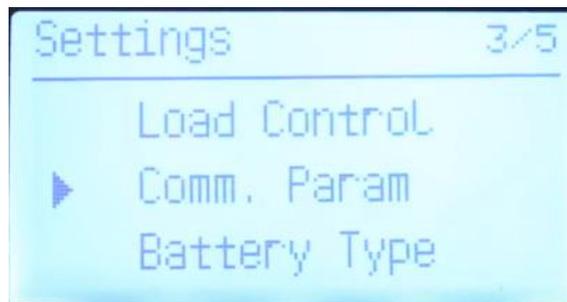


Figure 14 Communication Parameters

Enter 'Comm. Param' and select 'OFF' for the DHCP.



Figure 15 Switch OFF DHCP

Then scroll down to the next page. Change the IP address as the Figure 14

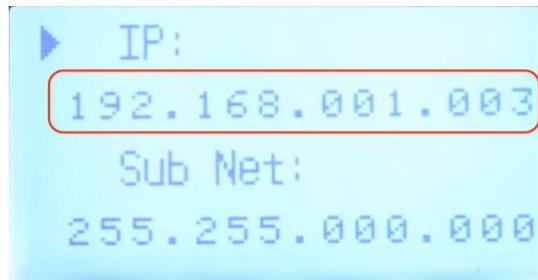


Figure 16 Set the inverter IP address

After the IP address setting completed, press the 'ESC' button to the 'Save Settings' page and press the 'ENT' button to complete the setting.

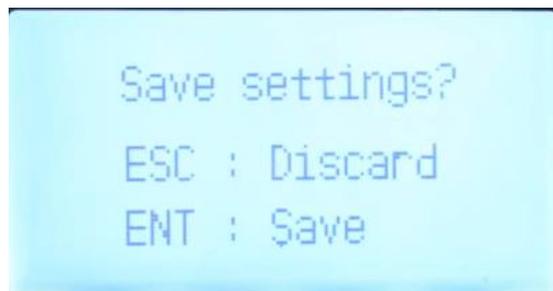


Figure 17 Save the settings

2.3.2 Ethernet cable connection

Open the hybrid inverter's cover. Connect the ethernet cable between the Ethernet interface of the inverter LCD board and the computer.

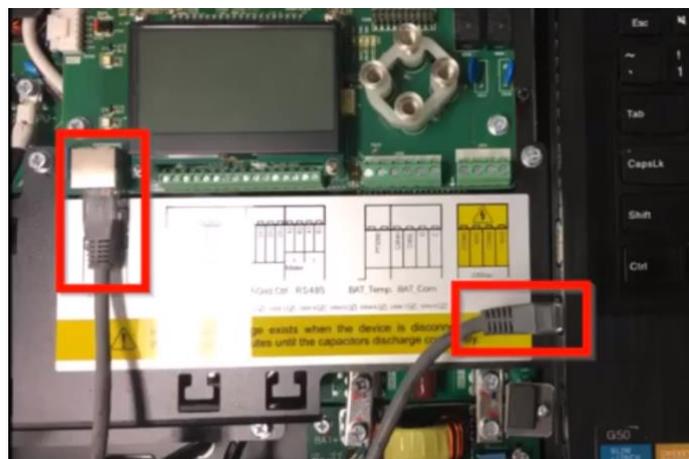


Figure 18 Connect inverter with the laptop

2.3.3 Laptop IP setting

Before conducting the upgrade, we also need to change the setting on the laptop. Make the wireless connection on the computer disabled and get the inverter’s IP address

Right click the Wi-Fi icon on the bottom right corner of the taskbar.

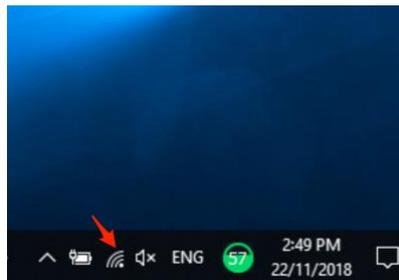


Figure 19 Select Wi-Fi icon

In the menu click ‘**Open Network and Internet settings**’ (Figure 20).

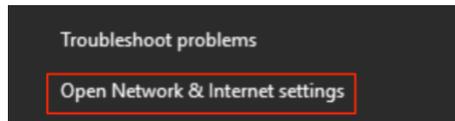


Figure 20: Open Network and internet settings

Select the ‘**Ethernet**’ on the sidebar of the popup window, click “change adapter option”.

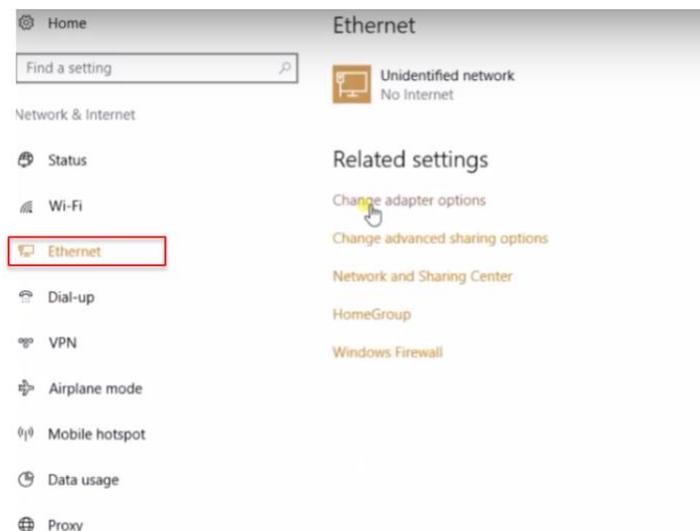


Figure 21: Change adapter settings

After you select the **'Change adapter options'**. Right click the Wi-Fi and disable it.

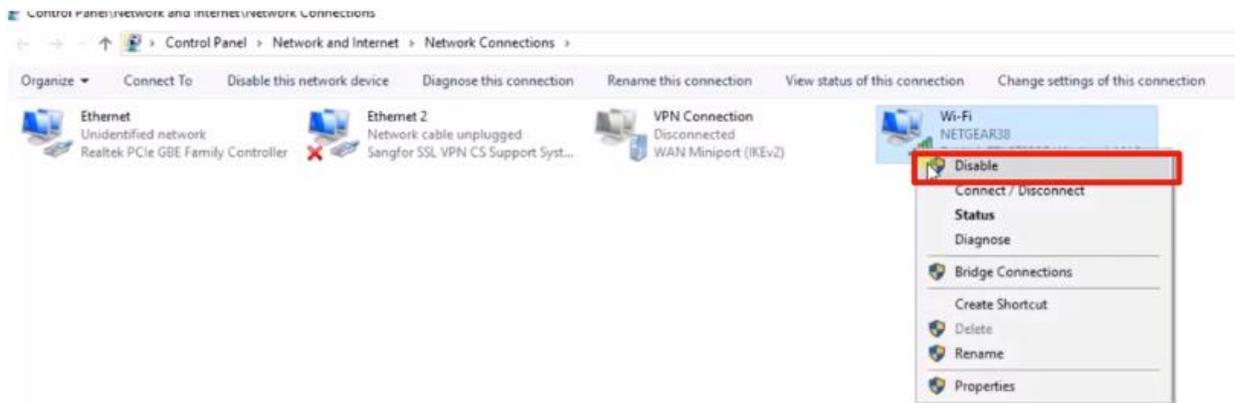


Figure 22 Disable the Wi-Fi function

Right click the Ethernet icon and select **'Properties'** in the pop-up menu. Then double click the **'Internet Protocol Version 4 TCP/IPv4'** (Figure 21)

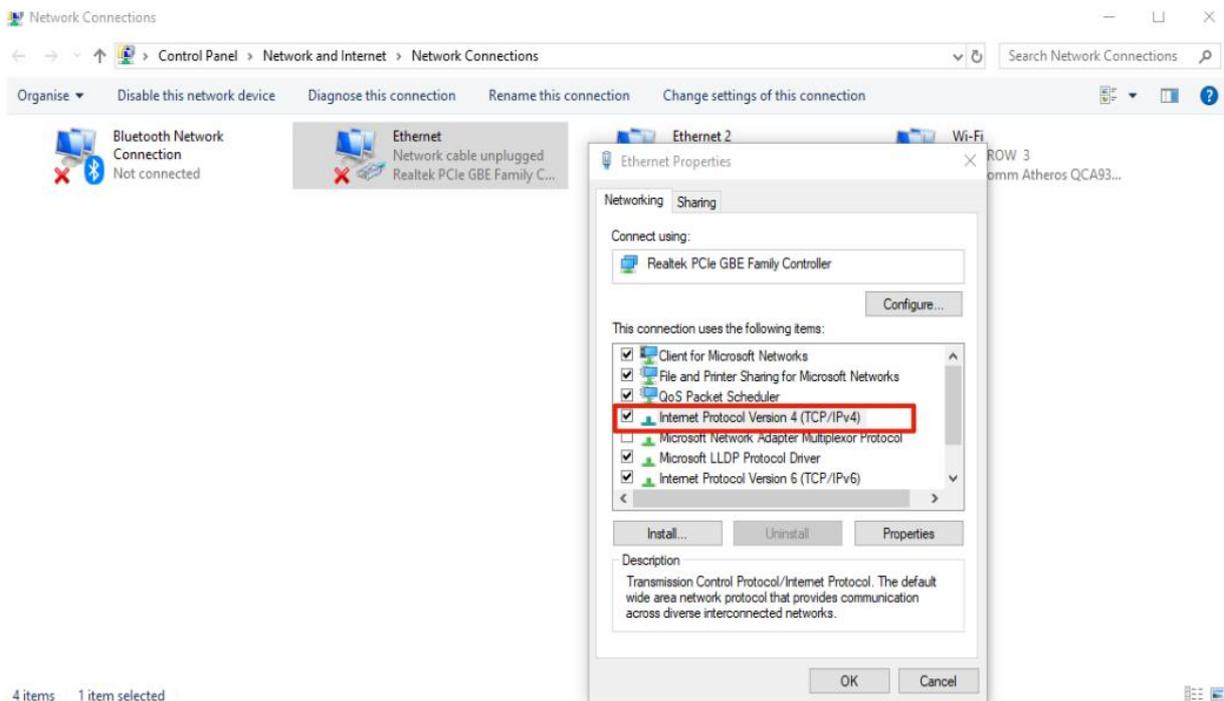


Figure 23: Right click Ethernet, and select properties

Set the IP address as shown in Figure 24. Make sure that the IP address must be different from the inverter's one (last three digits). Then click the 'OK' and 'Close' the page

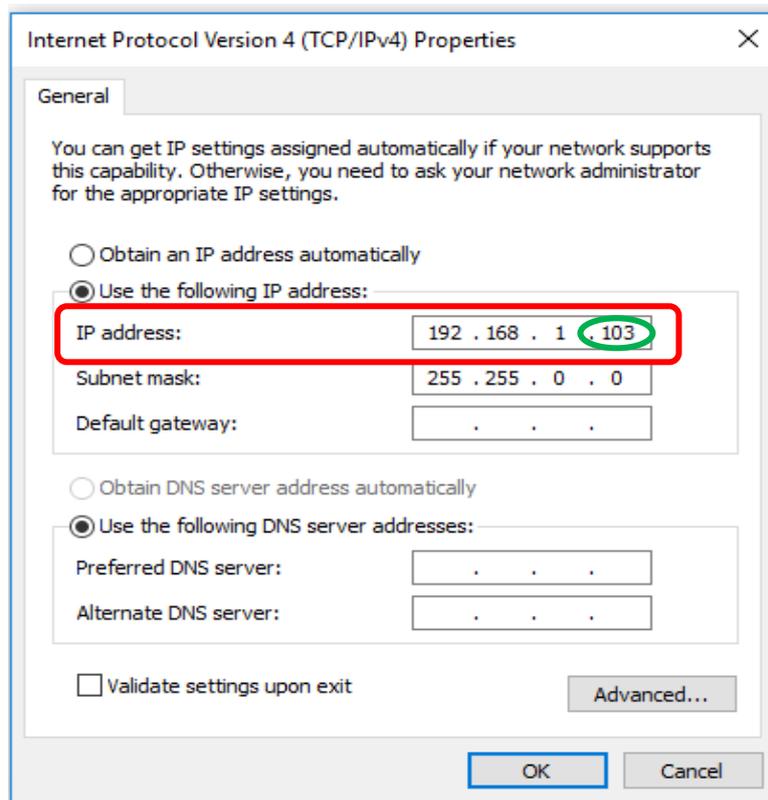


Figure 24: Set the IP address

3. Firmware upgrade

Double click on the **Solar Device Manager** to run the program, windows will appear as shown below.



Figure 25 Launching Device Manager

Close the 'DXperience' window and wait for a while. It will pop up the search window (Figure 26). Select the 'Normal search' and click 'Next'.

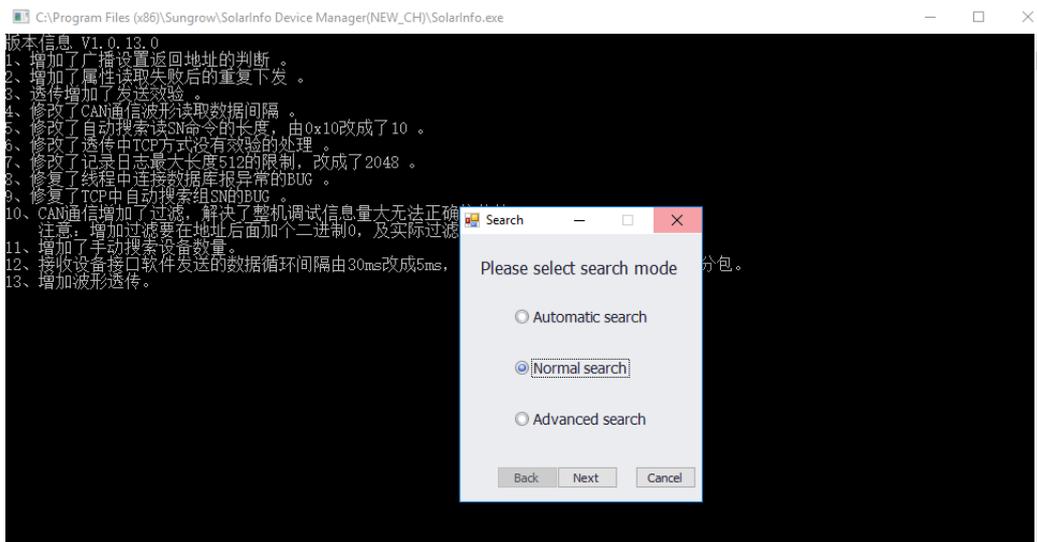


Figure 26 Select normal search

Click on the 'Modify' button (Figure 27). In the "Channel Configuration" pop up window, select 'Network', set the same IP address as the inverter's. and the Port as 502, and then click the 'Confirm' button.

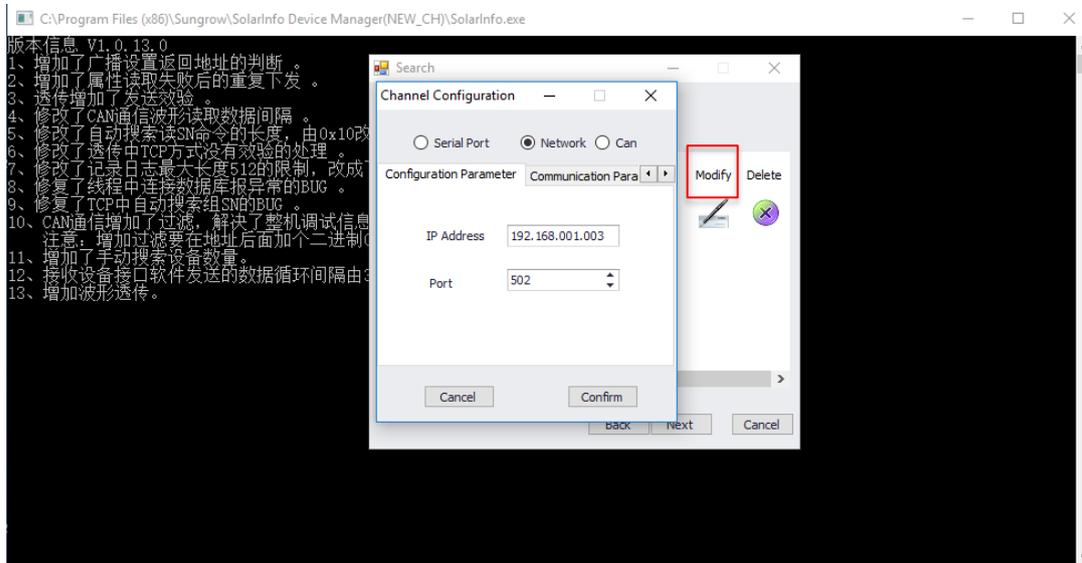


Figure 27 Modify the Network

Then click the **Next** and **Search**

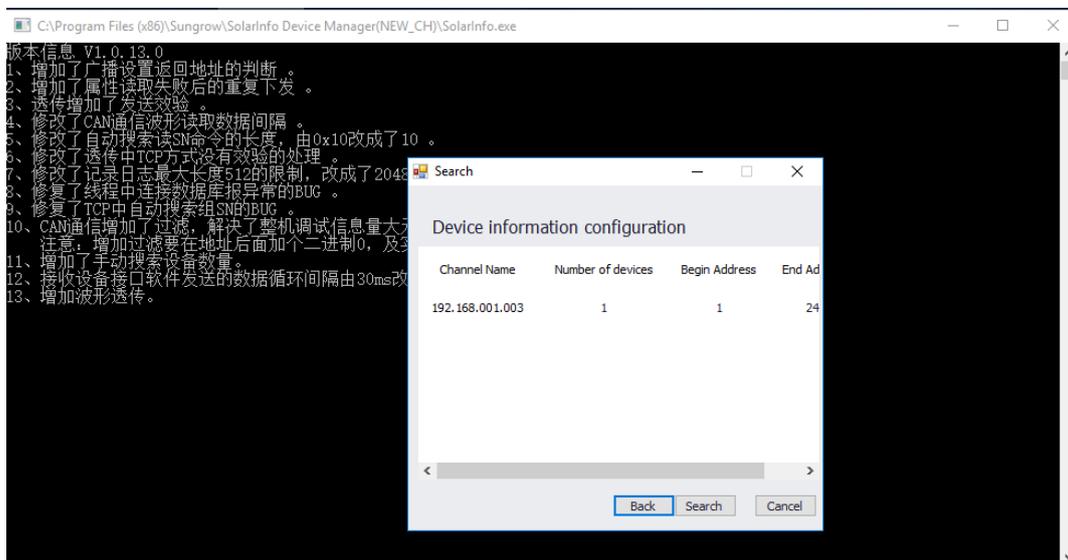


Figure 28: Add button

If the inverter is being searched for, users should be able to see a searching window (Figure 29)



Figure 29: searching window

Once the search is complete, the window will pop up with a summary table containing inverter information such as the inverter SN and software version.

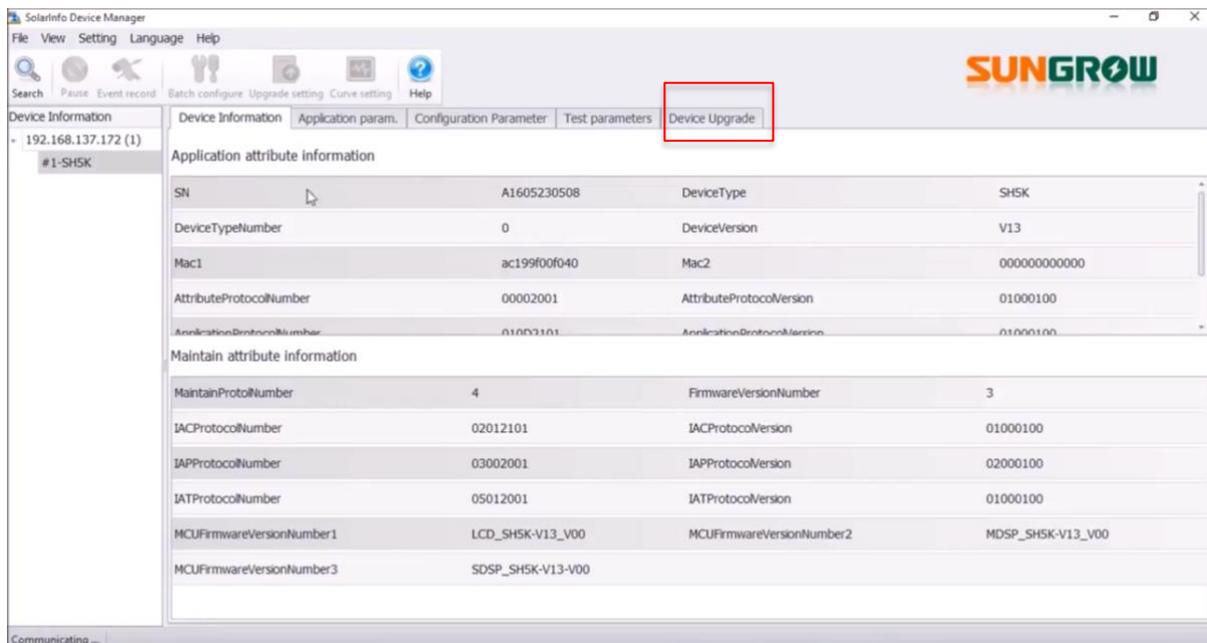


Figure 30: SolarInfo Device Manager

Click on **'Device upgrade'**, then click **'Add a new file'** near the top right of the window, then choose **'Browse'** to add the firmware document. Because all three files cannot be uploaded simultaneously, it is needed to add each file consecutively. Finally, click "upgrade".

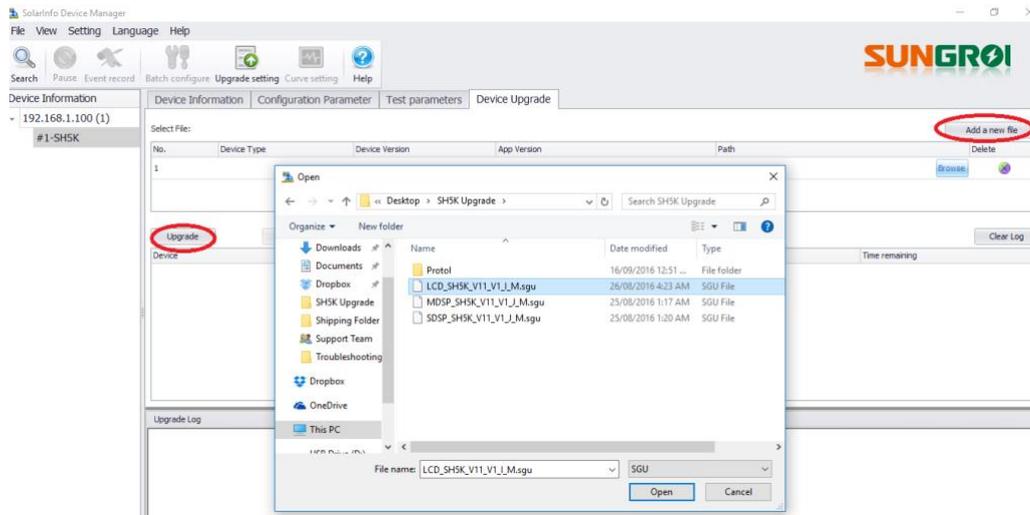


Figure 31: Device upgrade→“Add a new file”→Browse→Upgrade

4. Upgrade Verification

It will take about 10 to 15 minutes to complete the process.

When all three required documents have been successfully upgraded, restart the inverter.

Then press ‘**ENT**’ to ‘**Setting**’ via the main menu, use password “002” to enter, then choose ‘**Soft Version**’ to verify

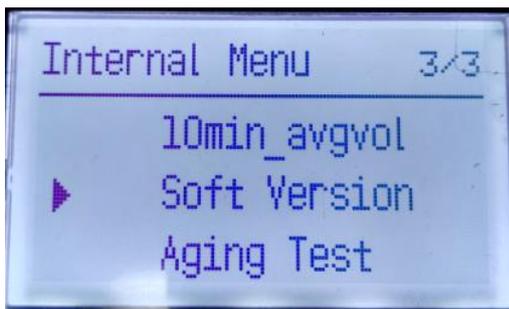


Figure 32: Select Soft Version

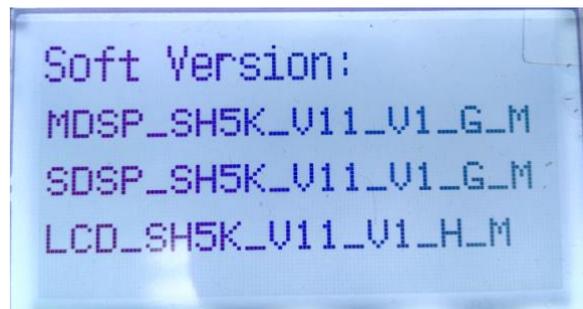


Figure 33: Soft Version files

Click [here](#) for the firmware upgrade package (SH5K+) via a laptop and click [here](#) to watch the video tutorial.