1. Preparation Before Use

1) MagicVision Software

MagicVision.exe	2026/8/10 8:19	应用程序	39,844 KB

2) USB to 485 Tool: If you do not need to use the oscilloscope, a tool supporting 115.2kbps baud rate is sufficient. If you need to use the software oscilloscope, you must use a USB to 485 converter that supports 750kbps.

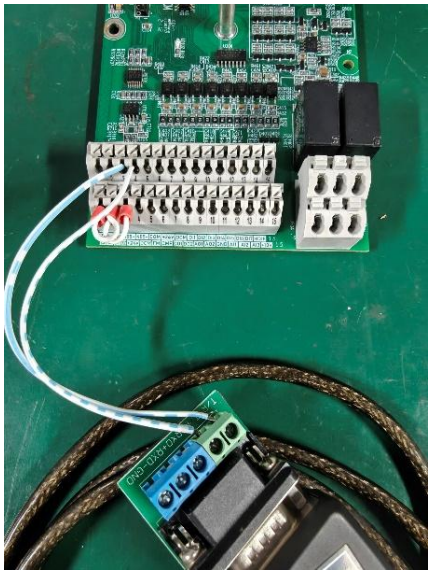
3) Computer (System WIN7 or above)

4) CM680 Inverter

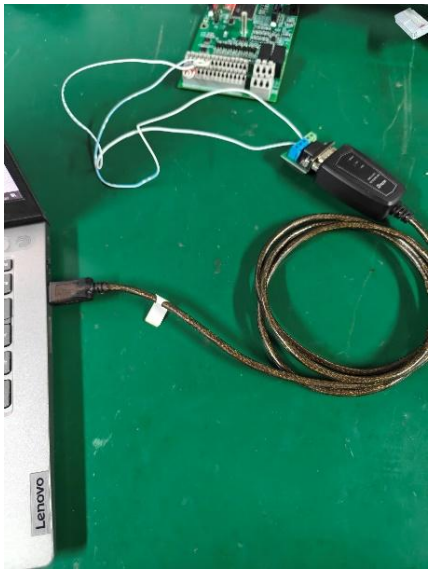
5) Two wires

2. Connection Method

1) The hardware connection method is shown in the figure below



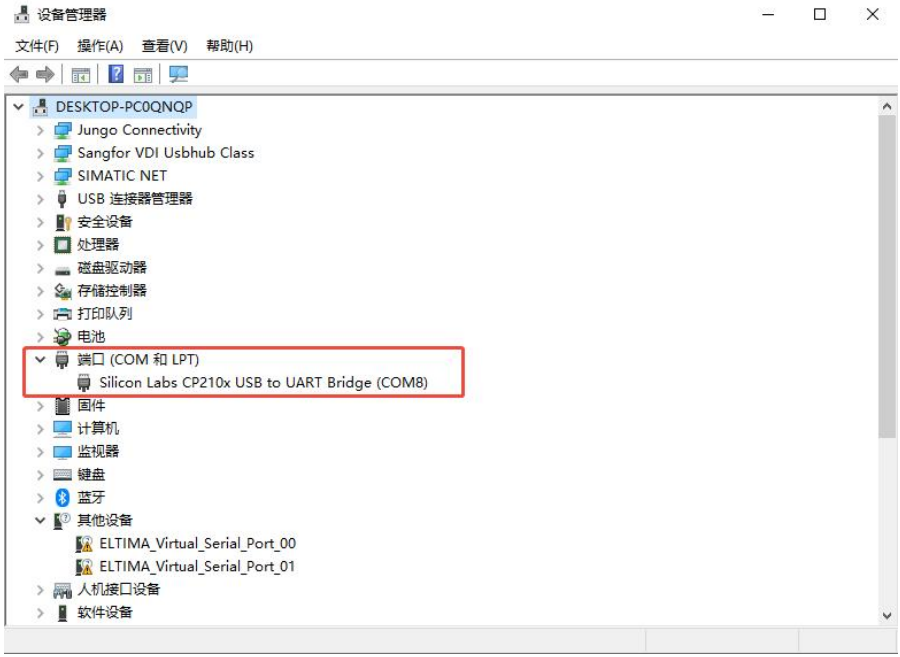
Connect 485+ to T/R+, connect 485- to T/R-



Overall Hardware Connection

2) Scan Connection

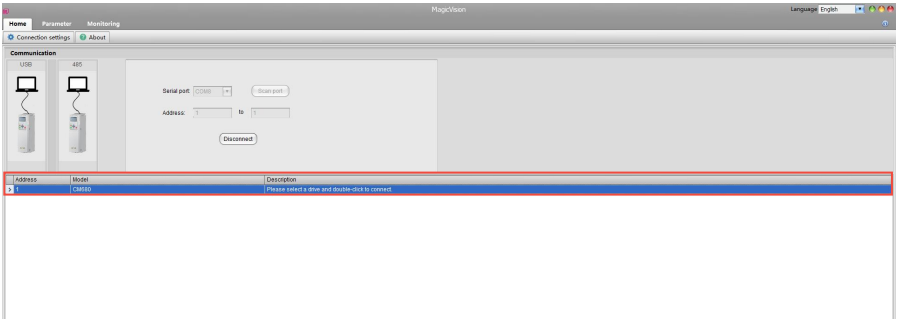
① After connecting to the computer, check the Device Manager to see the port



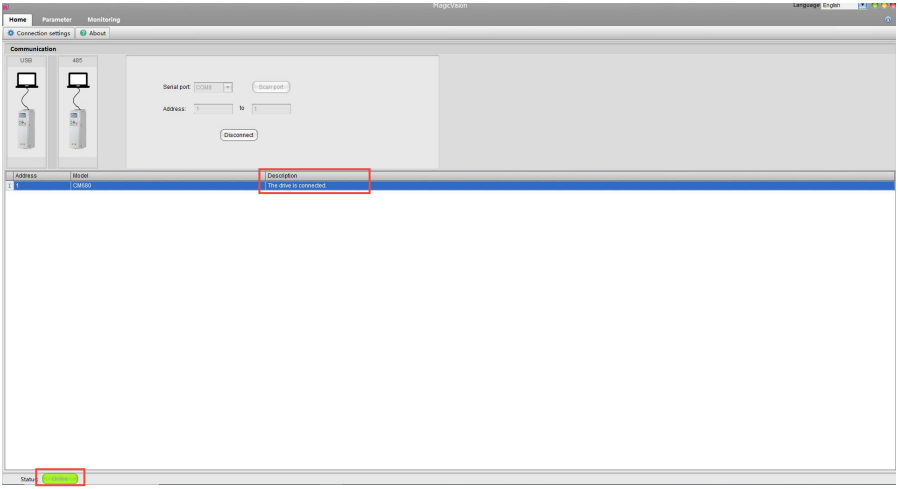
② Open the MagicVision software, first click Scan Port and COM8 will appear (it might not be COM8 on different computers), then click Search to access the inverter.



③ Clicking search in the previous step will display the CM680 double-click to connect prompt, as shown in the figure below



④ Double-click to connect; it will prompt that the driver is connected, and "online" will be displayed in the bottom left corner.

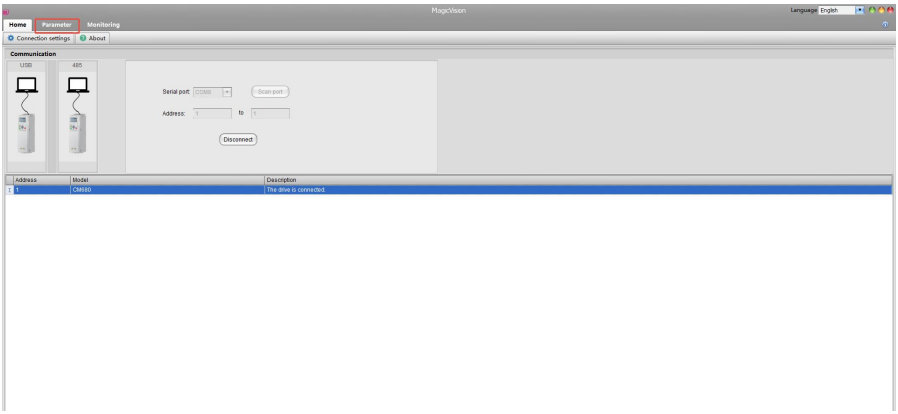


⑤ Switch language, can switch between Chinese and English

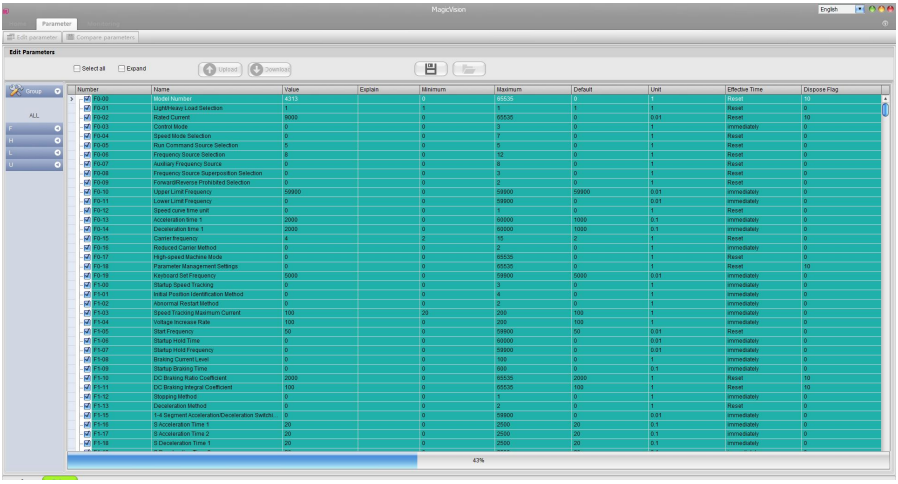


3. Parameter Interface Description

1) First click Parameter, then click Parameter Edit.



2) Wait for the progress bar to complete; parameters uploaded successfully.



3) Parameter Modification

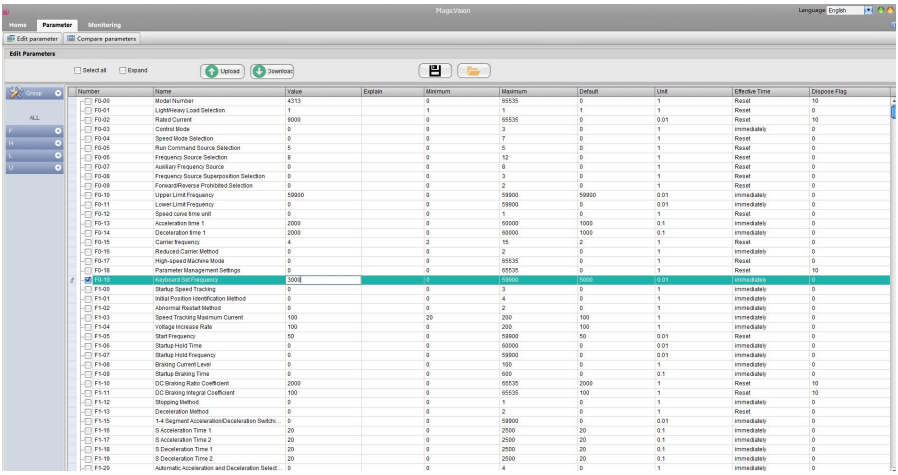
Method 1: After entering the parameter value and pressing the Enter key, it will be automatically checked. Pressing the Enter key again at this point will download the parameter.

Method 2: First check the parameters to be downloaded, enter the parameter value, and click the download button to download it.

Pay attention to the unit column in the table. Taking F0-19 as an example, if the unit is 0.01, then 5000 represents 50.00.

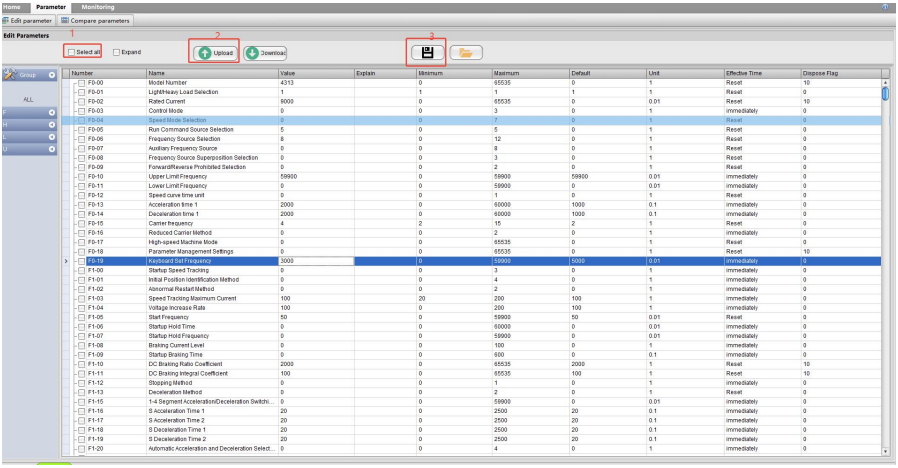
How to verify if the parameters have been successfully modified?

Select the parameters and click the upload button to see the parameter values. For example, if you write 5000, the value read back should also be 5000. If it is not, it means the write operation failed.

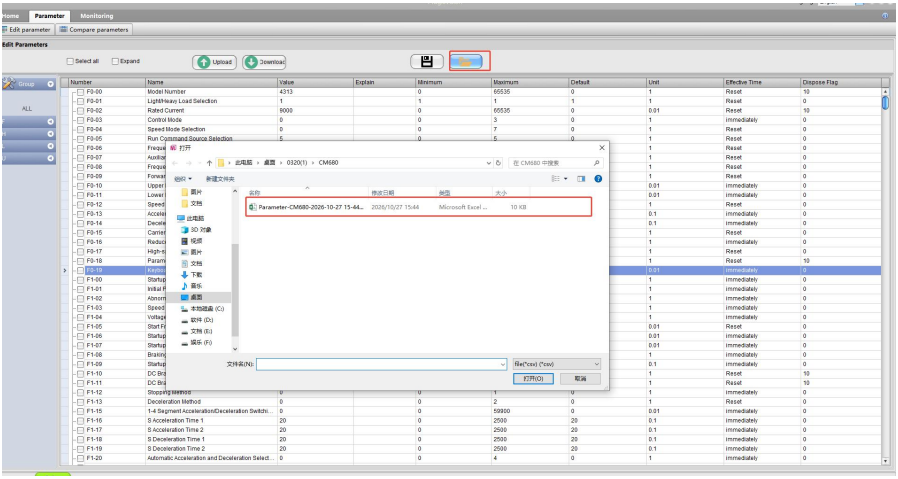


4) Parameter Upload and Download

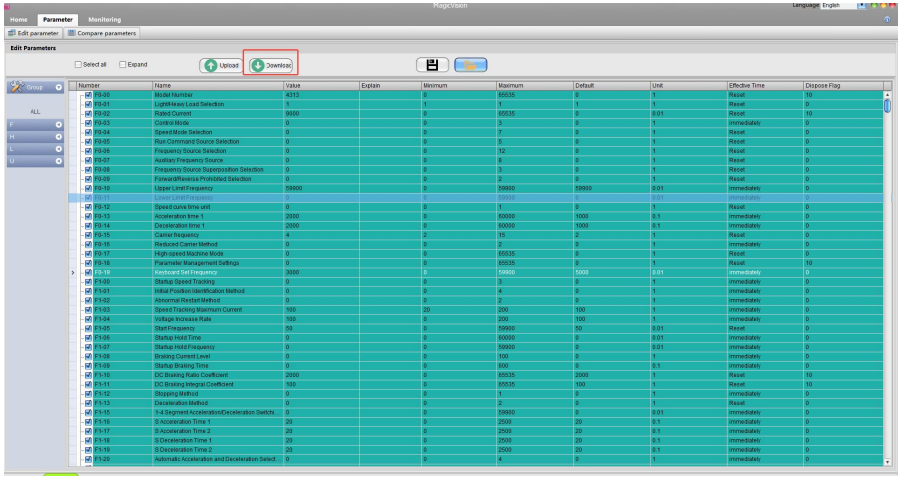
① For parameter upload, first click Select All, then click Upload. Finally, click to save the parameters to the computer, where they will be stored in CSV format.



② Parameter Download, click to import stored parameters to the computer



③ After the import is completed, as shown in the figure below, click the download button to download all parameters into the inverter.



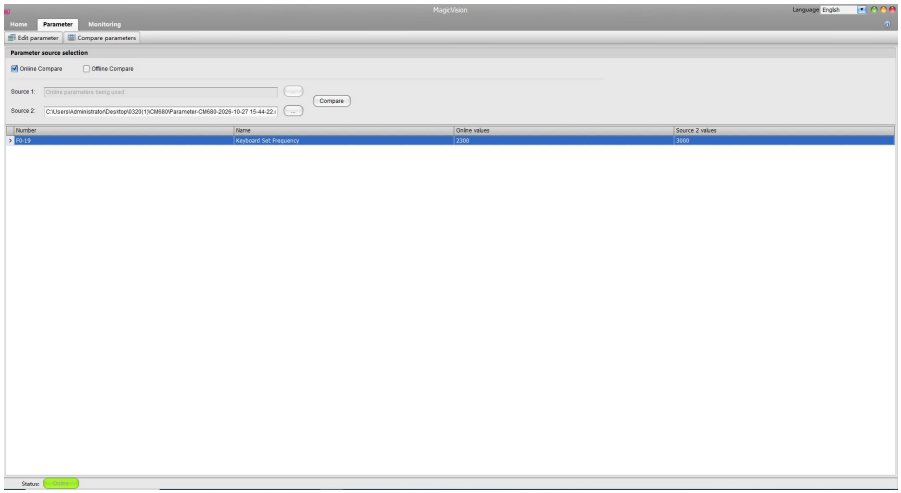
5) Parameter Comparison

The parameter comparison function allows you to identify which parameters have been modified. There are two modes: online comparison and offline comparison.

Online Comparison: Compares the currently active parameters with the parameter table saved on the computer.

Offline Comparison: Compares two sets of parameters that are both saved on the computer.

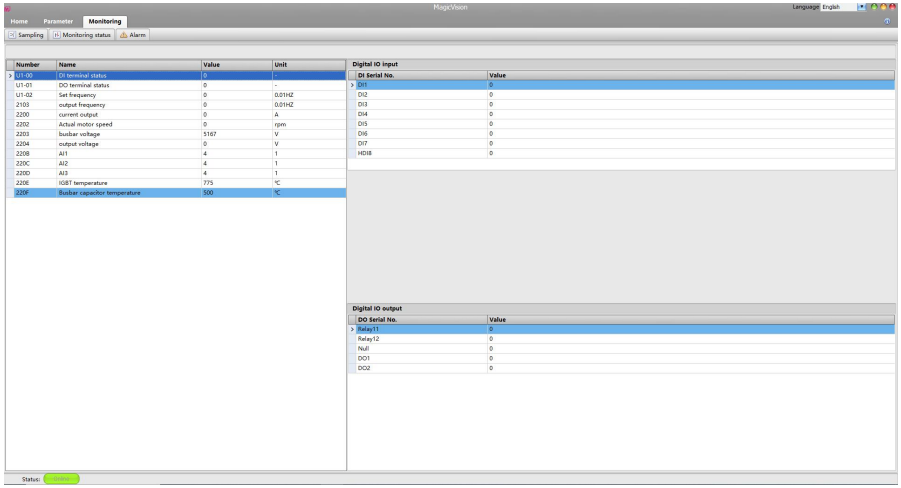
Any differences found after the comparison is complete will be displayed in the blank area below.



4. Monitoring Interface Description

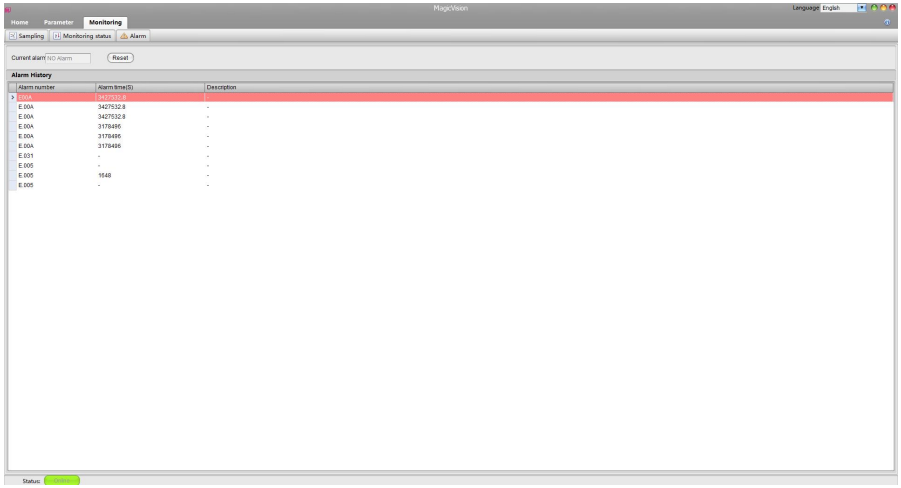
The monitoring interface features waveform plotting, status monitoring, and alarm information.

1) Status Monitoring Interface: The values displayed include terminal status, output current, output frequency, and other data. These are collected in real-time and dynamically updated, allowing for an intuitive view of the data.



2) Alarm Information

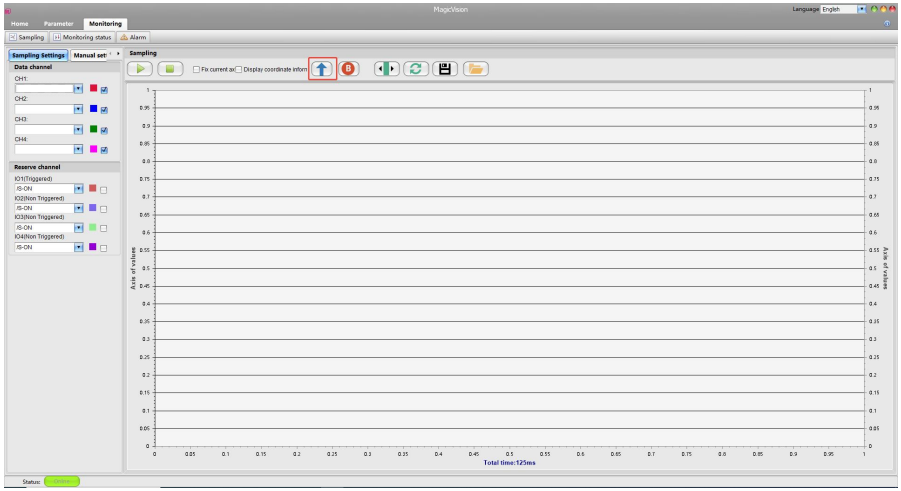
Clicking on the alarm information reads the current alarm code; it reads once per click. Clicking 'Alarm Reset' allows you to reset the fault.



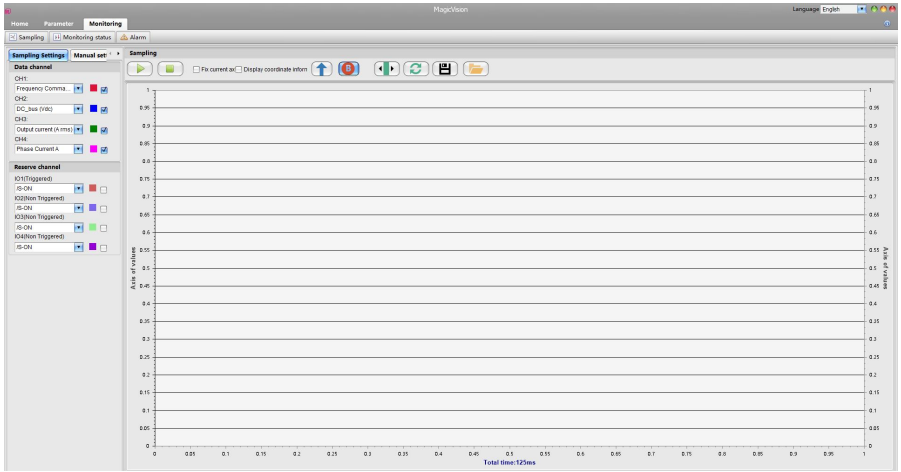
3) Waveform Plotting

This function requires a USB to 485 tool that supports high baud rates; the baud rate during the oscilloscope process is 750000bps

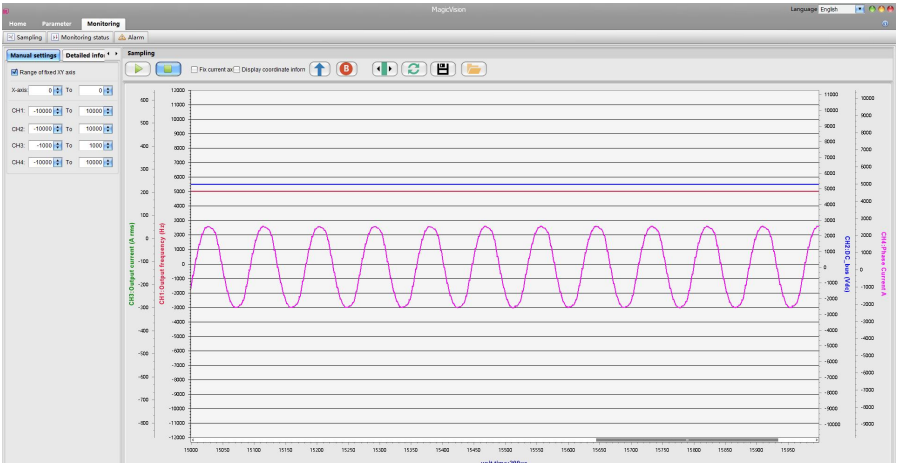
① Need to upload monitoring parameters first



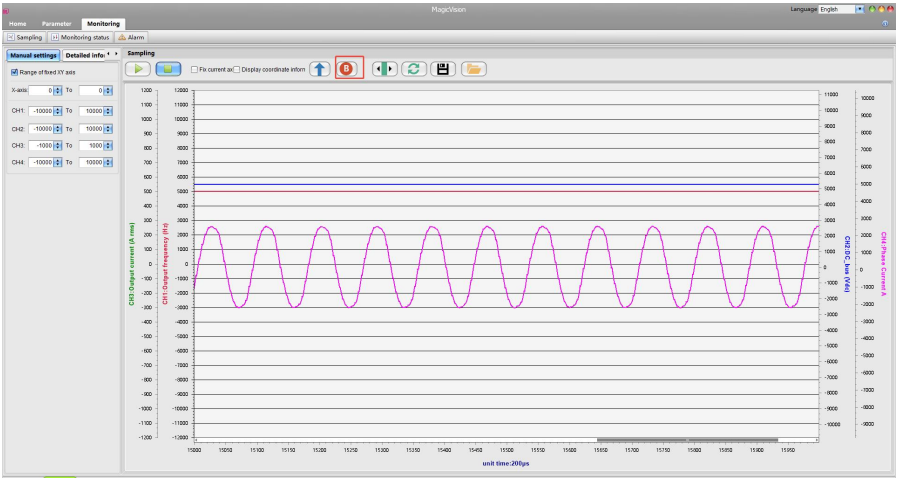
② After the upload is complete, you can see the channel parameters, and select one of the 54 variables through the drop-down box.



③ Click Start Acquisition to enter the waveform acquisition interface, and press Stop Acquisition to stop.



4) Stop the oscilloscope. If you want to perform the next acquisition, you need to reset the baud rate. After stopping the oscilloscope, click the B button.



5) To make the waveform look good, it is necessary to adjust the range.

