

XPView V2 User manual

catalogue

Part 1 Introduction

1.1 Instructions

1.2 Software architecture

Communication connection

Part 2 The main page of communication software

Part 3 Parameter

Part 4 Monitor

4.1 Waveform rendering

4.2 Status monitoring

Part 5 Trial run

5.1 JOG Control

5.2 Program JOG

Part 6 Tune

6.1 Single parameter tuning

6.2 Inertia recognition

Part 1 Introduction

1.1 Instructions

XPView V2 software is suitable for communication with XDQ1, XDQ2 series servo drives, for monitoring drive status, modifying parameters, collecting drive data, etc.

Using this tool software, it is convenient for users to quickly get familiar with XDQ1 servo system and facilitate the application of servo system.

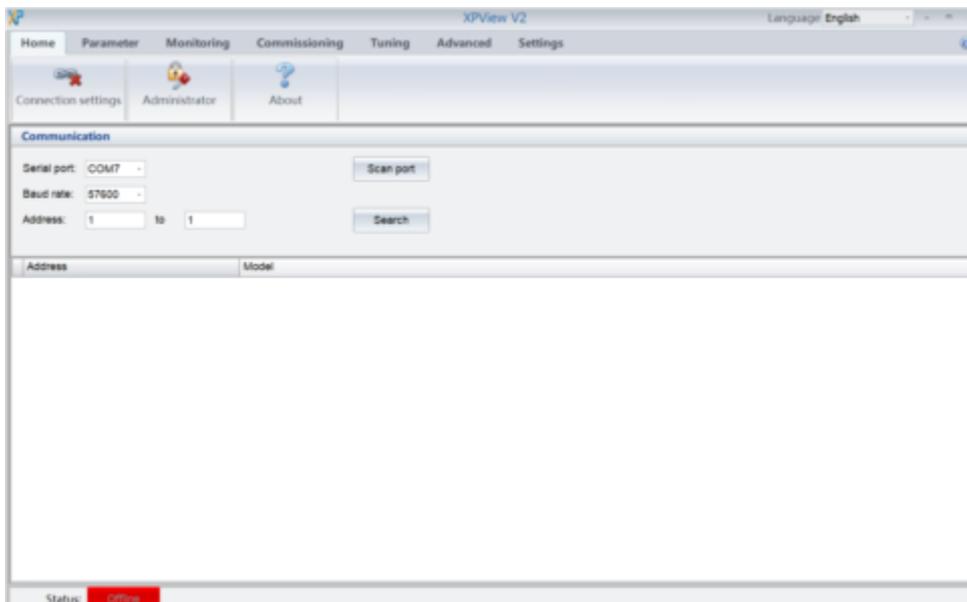
1.2 Software architecture

This communication software consists of the following parts:

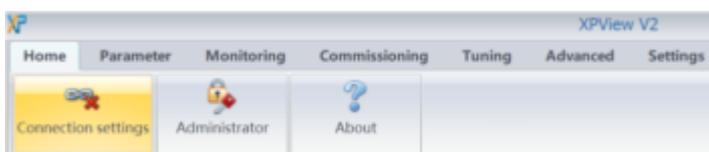
- ▶ Communication connection Settings;
- ▶ Drive information display;
- ▶ Edit parameters, save parameters, restore factory values;
- ▶ Driver related status monitoring;
- ▶ Waveform data acquisition, drawing graphics;
- ▶ JOG operation, PJOG operation;
- ▶ FFT analysis;

Communication connection

After the program starts, the following interface appears, the upper part of the interface is the navigation bar, and the lower left corner displays the driver status.

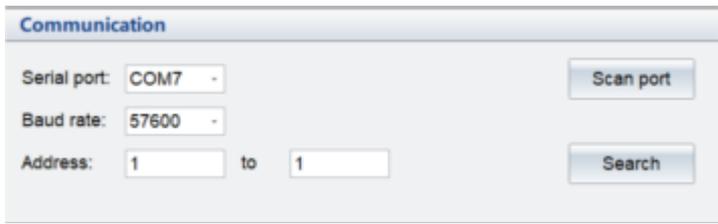


To use each function, click on each toolbar as shown below.

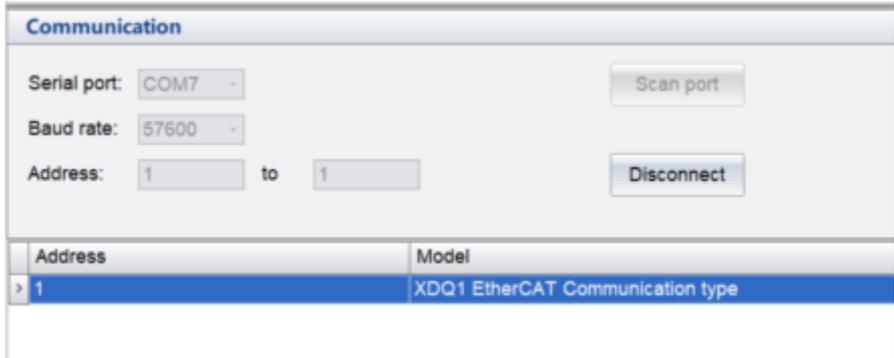


First set the communication, set the baud rate and communication address to match the value of the drive (by

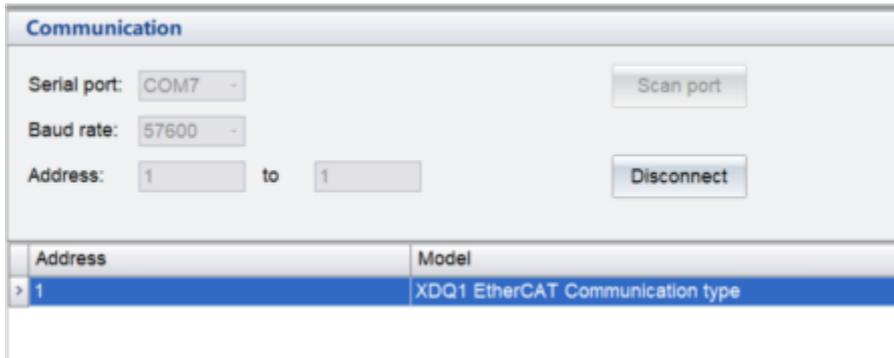
default, baud rate 57600, communication address is 1).



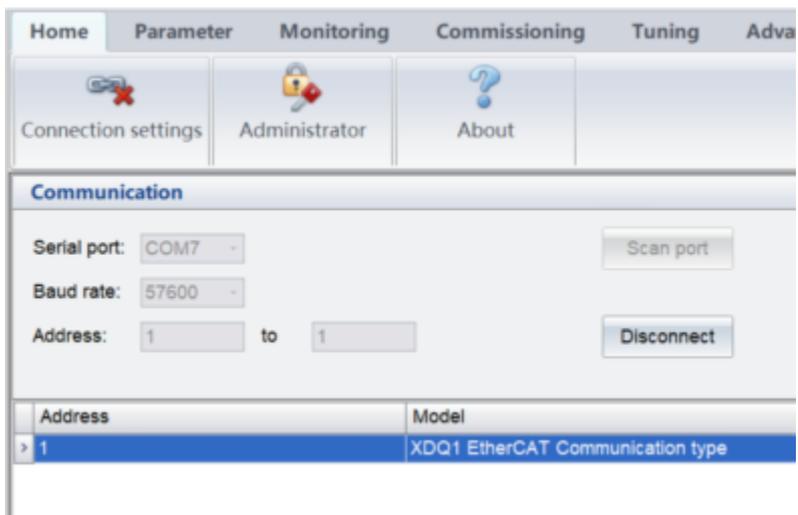
Click "Scan port" in the picture above, and the software will automatically search for the serial port number of the computer. If there are multiple serial ports, you need to manually select the serial port of the computer, and then click "search", the search drive information will appear, as shown below.



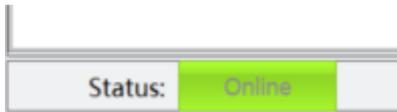
Double-click the connection in the drive model bar.



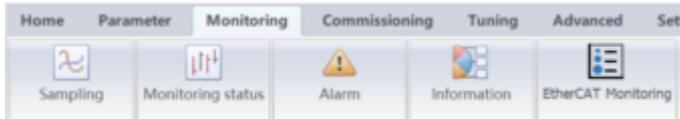
After the connection is successful, a message is displayed, as shown in the following figure.



The status of the drive in the lower left corner of the communication software changes from Offline to Online.

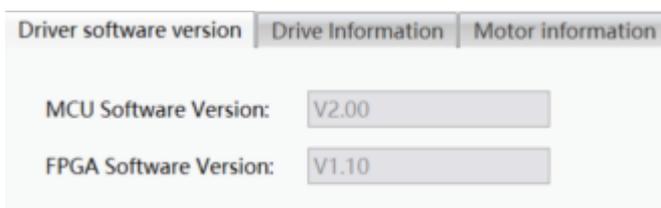


You can view servo-related information.

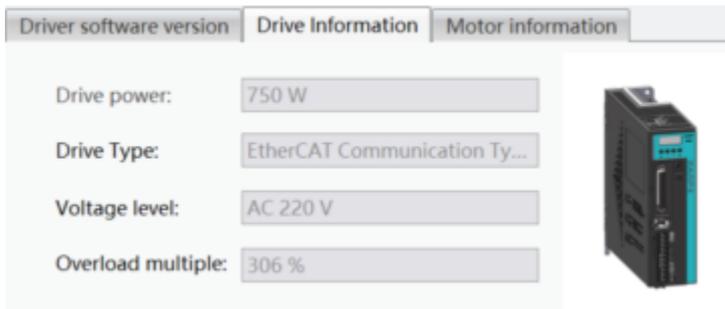


The servo information is as follows:

▶ Driver software version:



▶ Drive information:



▶ Motor information:

Driver software version	Drive Information	Motor information
Power:	750 W	
Encoder resolution:	131072 Pules	
Voltage level:	AC 220 V	
Rated speed:	3000 rpm	
Max. speed:	6000 rpm	
Rated torque:	2.39 N.m	
Rated current:	5.50 A	
Max. current:	16.90 A	

In addition, the VPView V1 software information is displayed, as shown in the following figure.

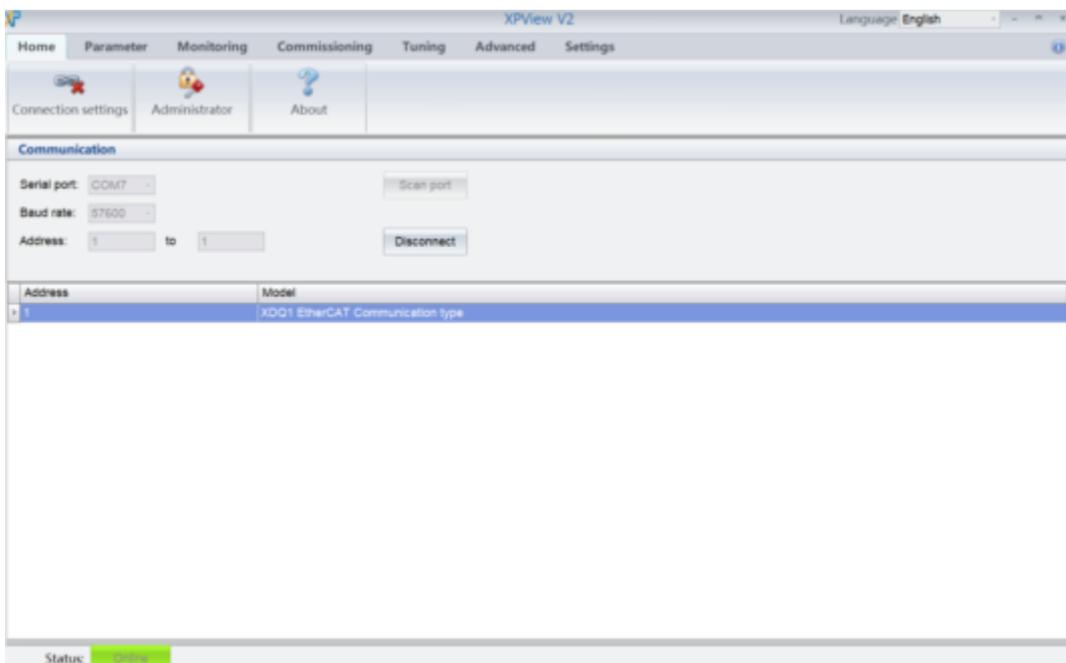
Home	Parameter	Monitoring	Commissioning	Tuning	Advanced	Settings
						
Connection settings	Administrator	About				

XPView V2

Software Version:V2.01
XARP Intelligent Technology Co., Ltd.

[Instruction manual](#)  <http://www.xarptec.com>

Part 2 The main page of communication software



Part 3 Parameter

Function 1: Parameter selection and cancellation, and modification

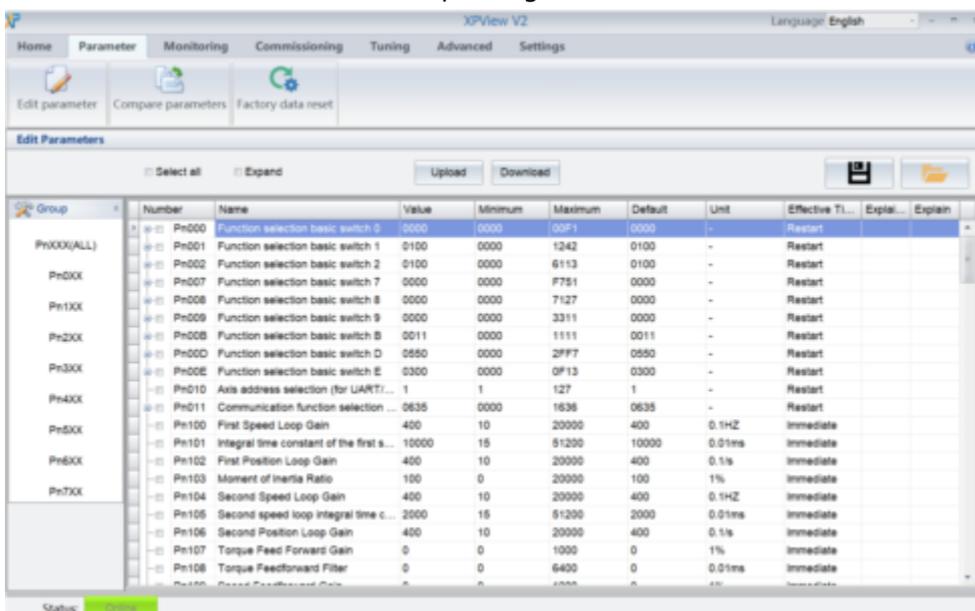
Select All Parameters: Check the Select All function box at the top of the parameter editing page.

Cancel All Parameters: Deselect the Select All function box at the top of the parameter editing page.

"Parameter Modification" : In the list data area of parameter editing, click the data under "Parameter value" to modify;

Select Parameter: Select the corresponding function box under Parameter No.

Cancel Parameter: Deselect the corresponding function box under Parameter No.



Function 2: Parameter upload and download

After a single parameter is modified, press Enter. The modified parameter is also downloaded to the drive.

"Parameter Upload" : Select the parameters to be uploaded, click mark ①, and the parameters will be uploaded to the computer from the drive, as shown below;

"Parameter Download" : Select the parameters to be uploaded, click mark ②, and the parameter table values will be downloaded to the drive, as shown below;



Function 3: Save and open parameter file

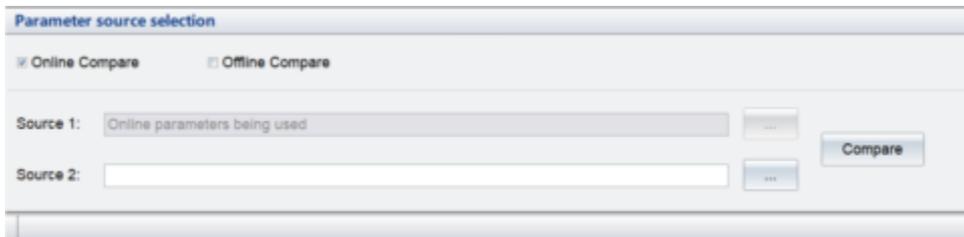
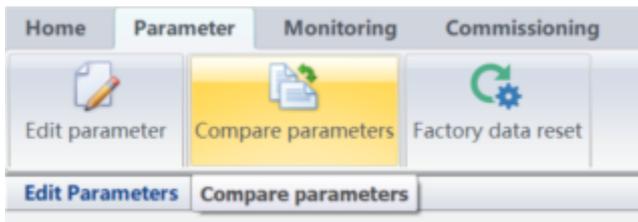
"Parameter file saving" : click mark ① to save the parameters to the computer, as shown below;

"Parameter file open" : click mark ② to import the saved parameters to the computer, as shown below;



Function 4: Parameter comparison

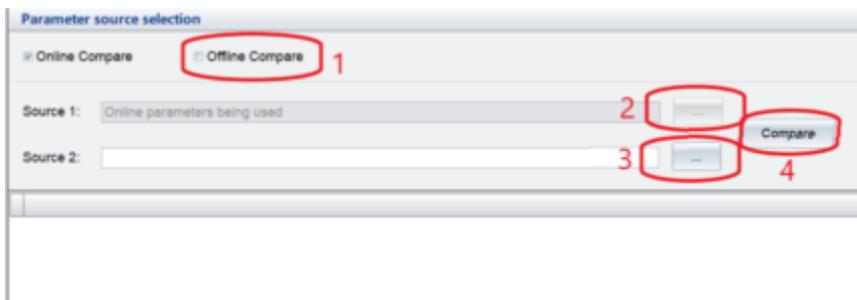
Click the mark to enter the parameter comparison page, as shown below.

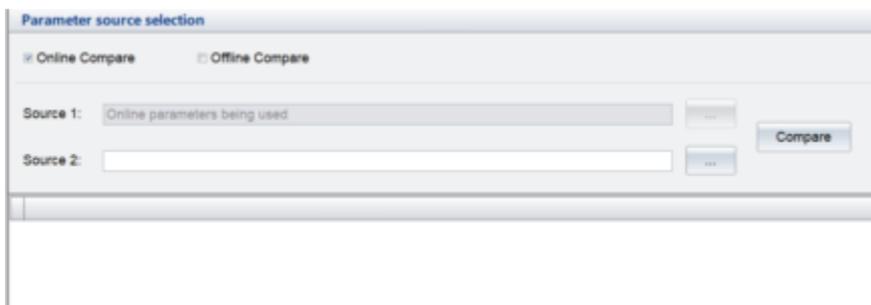


Online Parameter Comparison: Compares parameters on the current parameter page with parameter source 2.

Offline Parameter Comparison: Compares parameter source 1 with parameter source 2.

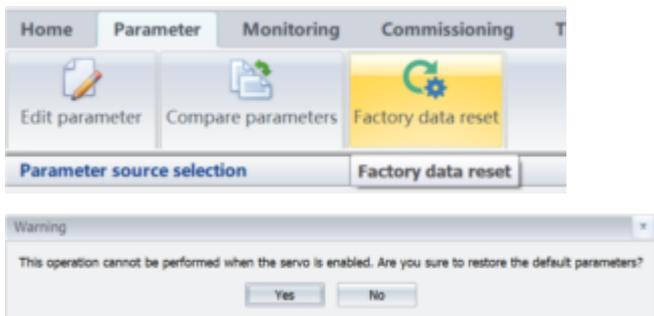
Check mark ① to compare the two saved parameter files, select the parameter files you want to compare at mark ② and mark ③ respectively, and click mark ④ to display the comparison results, as shown below.



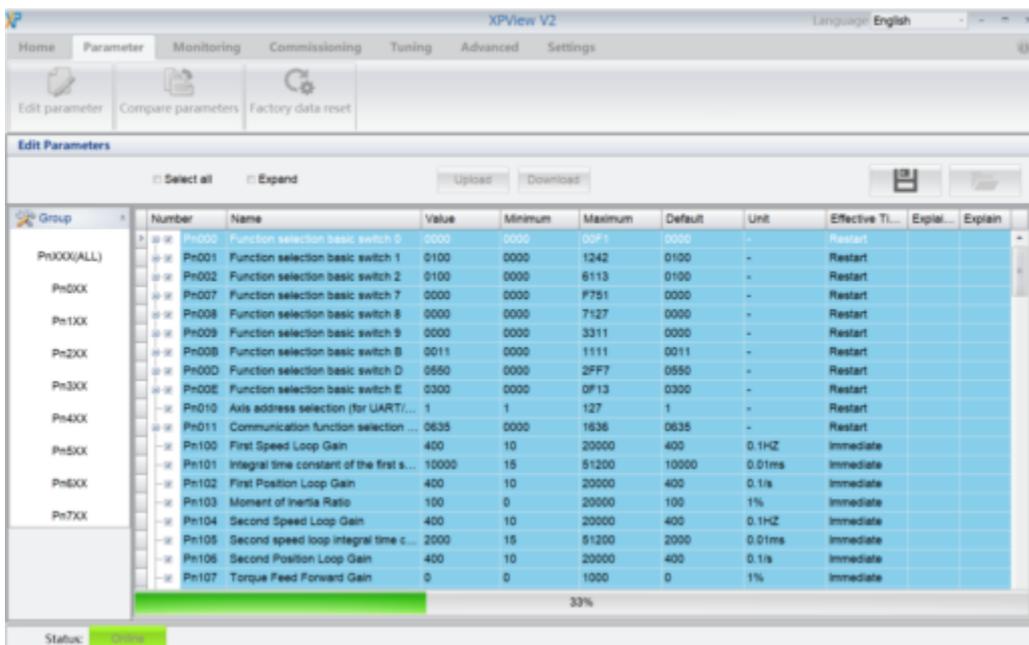


Function 5: Restore factory defaults

Click on the mark and the following message will appear.



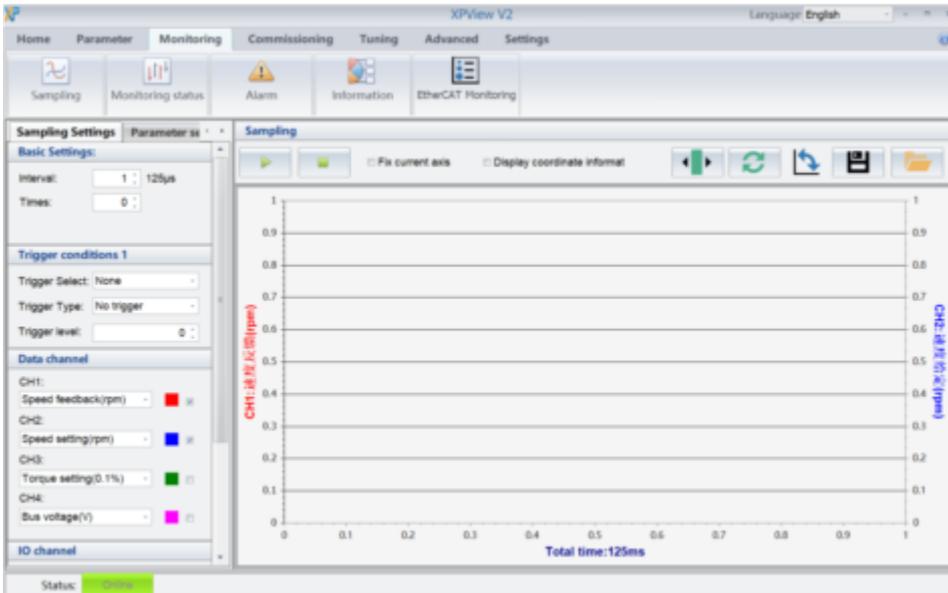
Click "Yes" to restore the factory value, the progress bar ends, and the factory value is restored, as shown below.



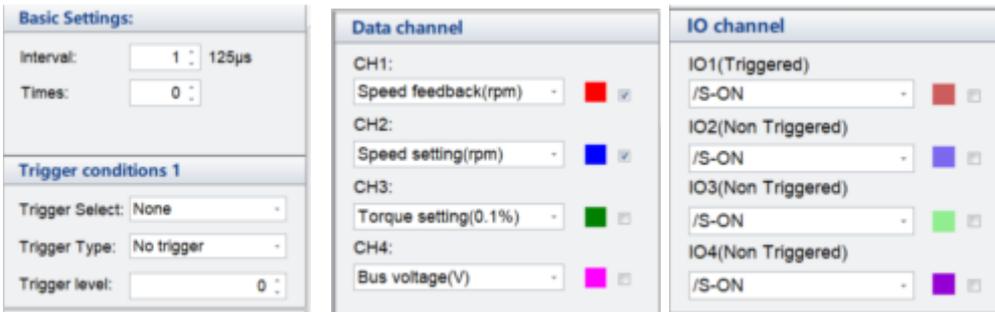
Part 4 Monitor

4.1 Waveform rendering

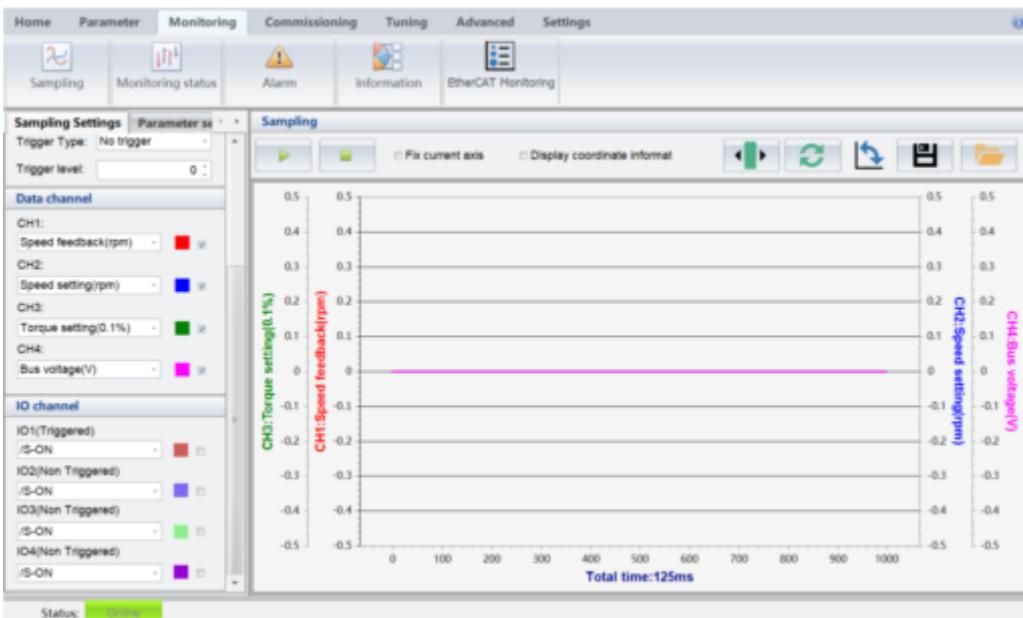
Click "Waveform drawing" to enter the waveform data collection page, as shown below.



Before data collection, set the following parameters as required:



Click mark ① to start data sampling, click mark ② to stop data collection, waveform drawing as shown below.





Click mark ① to enlarge the page display and facilitate the observation of waveform data.

The coordinate information of each axis will be displayed when the mark is checked, as shown in the figure below.

Display coordinate informat

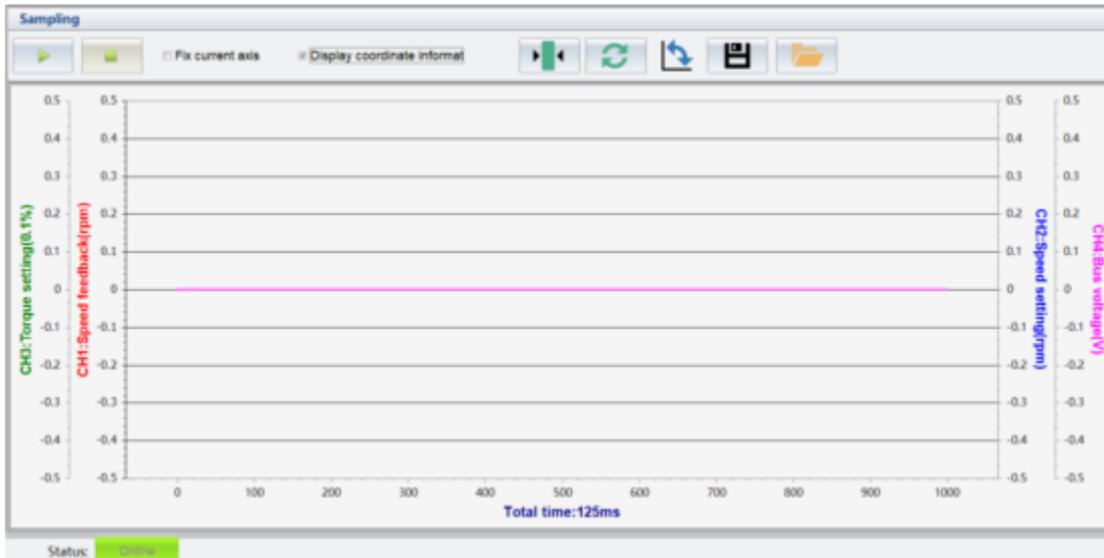


图1

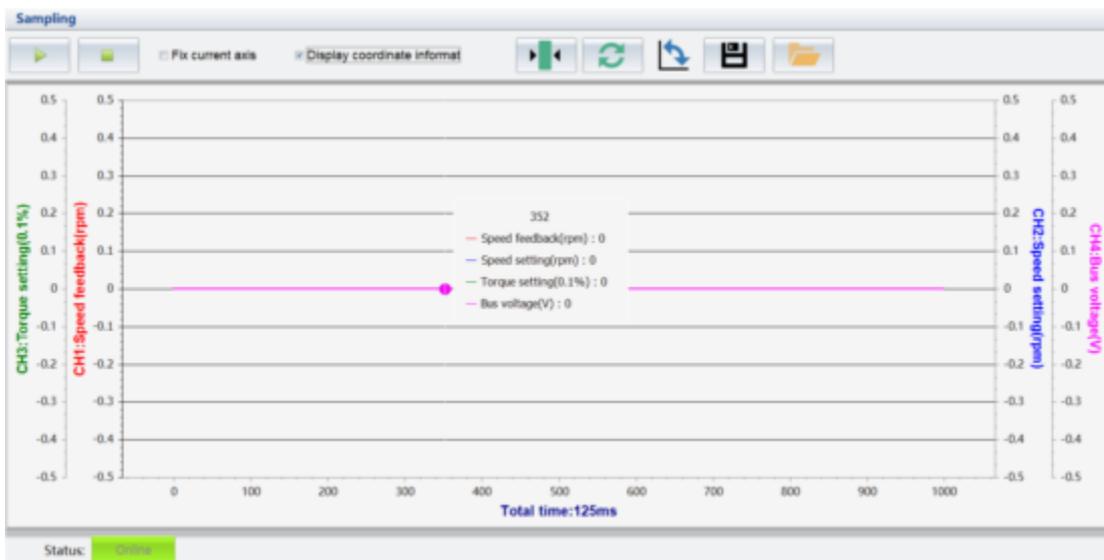


图2

Check mark ① to make each axis coordinate fixed;

Click mark ② to restore the graph;

Click mark ③ to save the image data;

Click mark ④ to import image data;

4.2

Status

monitoring

Click "Status Monitoring" to enter the monitoring mode, and the user can view the command value of the drive, the status of the input/output signal and the internal status of the drive.

Number	Name	Value	Unit
Un000	Motor Speed	0	[r/min]
Un001	Motor feedback pulse number (encoder unit)	0	[1 encoder pulse]
Un003	Pulse command input pulse number (before electr...	0	[1 command pulse]
Un005	Number of position deviation pulses (encoder unit)	0	[1 encoder pulse]
Un007	Feedback pulse counter	0	[1 command unit]
Un009	Position deviation counter	0	[1 command unit]
Un00D	Rotation angle 1	0	[1 encoder pulse]
Un00f	rotation angle 2	0	[deg]
Un010	Input Signal Monitor	0	-
Un011	Output signal monitoring	8	-
Un015	Main circuit voltage	0	[V]
Un016	Command pulse frequency	0	[0.1KHz]
Un020	Internal torque command	0	[%]
Un021	Torque command	0	[0.01V]
Un022	Internal speed command	0	[r/min]
Un023	Speed command	0	[0.01V]
Un030	Motor cumulative load rate	0	[%]
Un031	Drive Load Rate	0	[%]
Un032	Regenerative load rate	0	[%]
Un033	DB load rate	0	[%]
Un035	Total running time	4194940	[100ms]
Un050	Drive model	2	-
Un052	Maximum overload multiple	306	[%]
Un05A	current alarm number	1280	-

Digital IO input (Un010)	
DI Serial...	Value
1	0
2	0
3	0
4	0
5	0
6	0

Digital IO output (Un011)	
DO Seri...	Value
1	0
2	0
3	0
4	1

Click "Alarm Information" to see the historical alarm information.

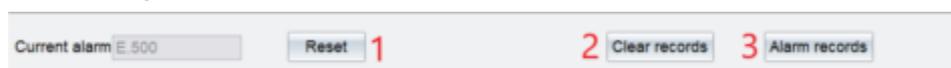
Current alarm: E.500

Alarm number	Alarm time(S)	Description
E.072	419494	current detection fault 2
E.070	419494	current detection fault 1
E.500	419494	encoder communication failure
E.072	419494	current detection fault 2
E.070	419494	current detection fault 1
E.500	419494	encoder communication failure
E.072	419494	current detection fault 2
E.070	419494	current detection fault 1
E.500	419491.4	encoder communication failure
E.500	303159.9	encoder communication failure

Click mark ① to clear the current alarm;

Click mark ② to read the alarm history;

Click mark ③ to clear the historical alarm record;



Part 5 Trial run

5.1 JOG Control

Click "JOG Control" on the toolbar and the following prompt appears.



Click Yes to go to the JOG Control page, as shown below.



After changing the JOG speed, click the "Set" button to change the JOG running speed. (Click the "Read" button to read the JOG value).

Mark ① : servo enable/disable (if the servo is in the alarm state, this function does not work);

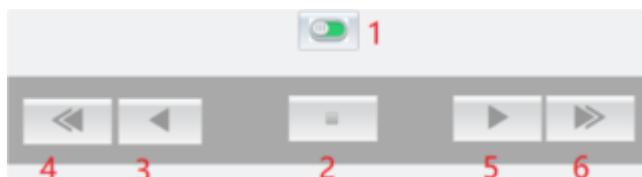
Mark ② : stop rotating (use the continuous operation button ④, ⑥);

Mark ③ : Forward turn: continue to press will continue to turn forward, release the button to stop;

Mark ④ : continuous forward rotation: continuous forward rotation after clicking, it will not stop after releasing the button, it will stop only after clicking mark ②, or turn off the servo enable to stop the operation;

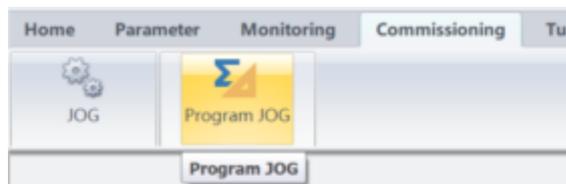
Mark ⑤ : Reverse: continue to press will be reversed, release the button to stop;

Mark ⑥ : Continuous reversal: continuous reversal after clicking, it will not stop after releasing the button, it will stop only after clicking mark ②, or turn off the servo enable to stop the operation;



5.2 Program JOG

Click on the toolbar "Program JOG" to appear the following prompt.



Click Yes to go to the program JOG page, as shown below.



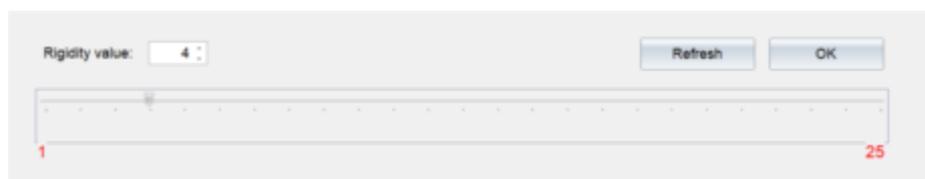
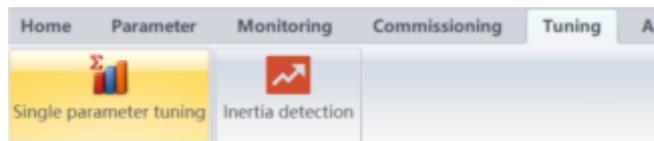
After editing the running switch, moving distance, moving speed, acceleration and deceleration time, waiting time, moving times and other parameters of the program JOG page, click the "Set" button to download the parameters to the drive.

The operation method is similar to the "JOG operation".

Part 6 Tune

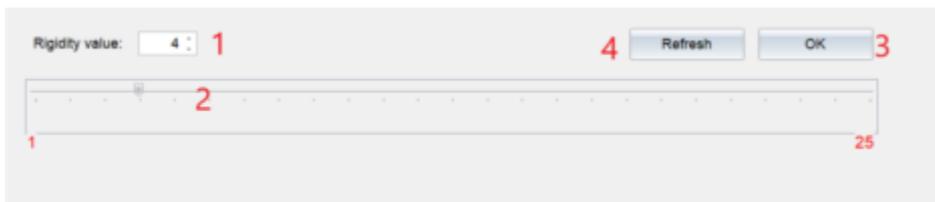
6.1 Single parameter tuning

Clicking on the mark will bring you to the single parameter tuning page, as shown below.



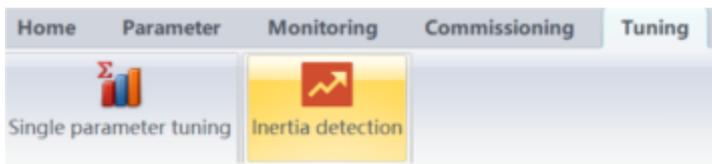
Change the rigidity value by changing the rigidity value at mark ① or sliding the rigidity value at mark ②, then click on mark ③ to set the rigidity value.

Click mark ④ to read the drive rigidity value.



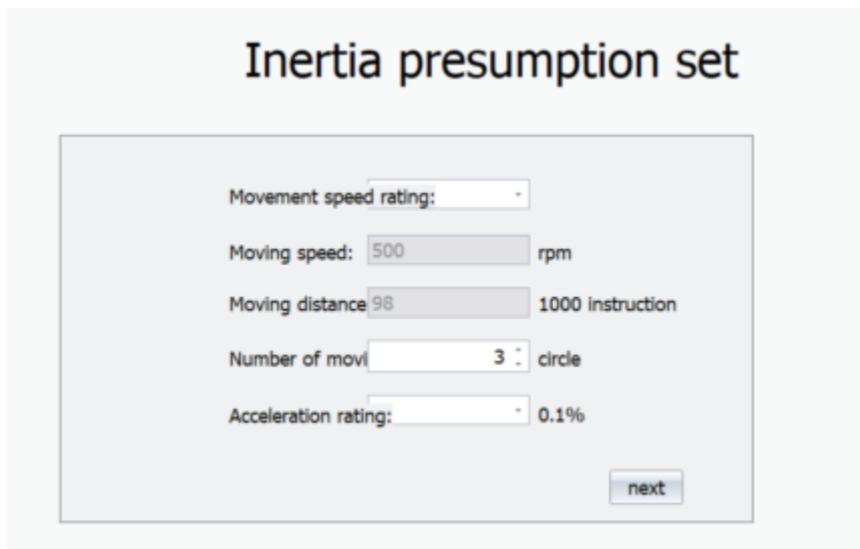
6.2 Inertia recognition

Click the tuning menu and select inertia recognition to enter the inertia recognition function, as shown below.

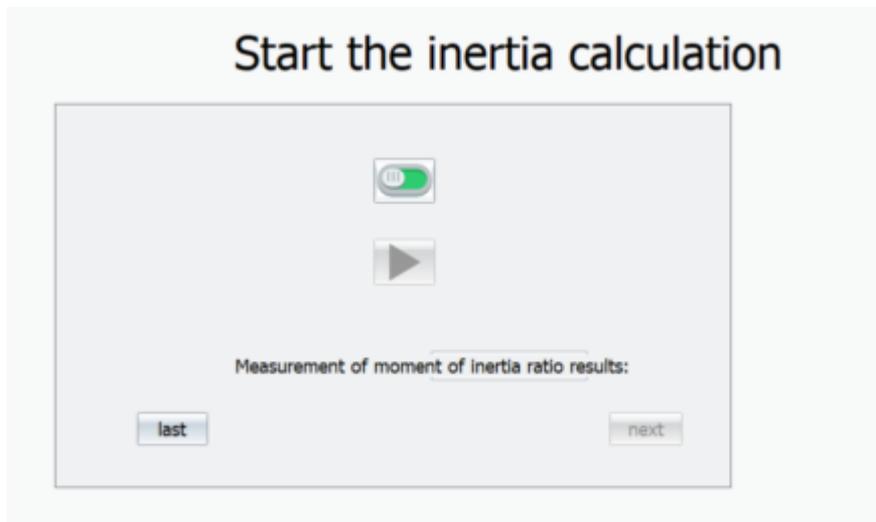


Inertia recognition steps:

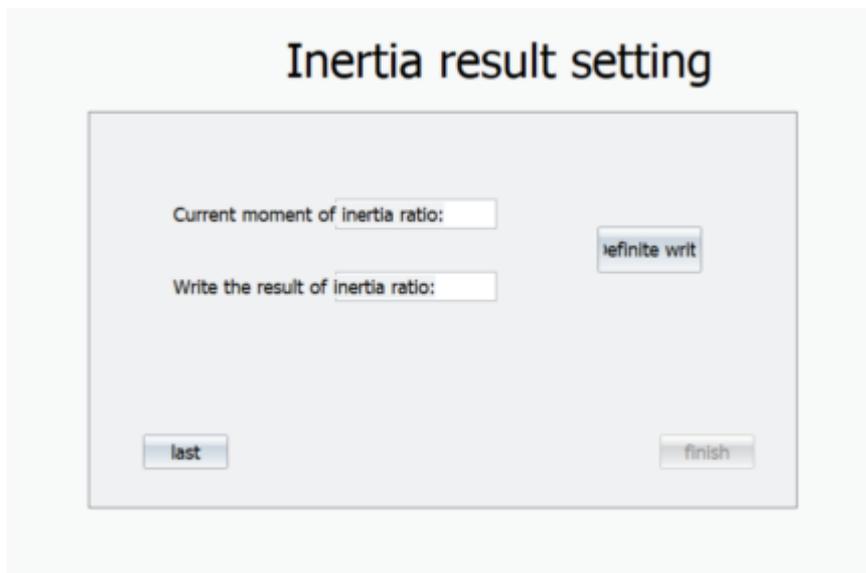
- 1, set the inertia recognition parameters: speed, acceleration, rotation number



- 2, Enable servo, start inertia recognition, wait for inertia recognition, the recognition result is shown in the following figure, can be manually micro-adjusted



3, Set the inertia ratio, as shown below, to complete the setting.



4, Click the Finish button to end inertia recognition.