

细节造就品质 科技引领未来
THE DETAILS CREATE QUALITY THE TECHNOLOGY LEADS THE FUTURE

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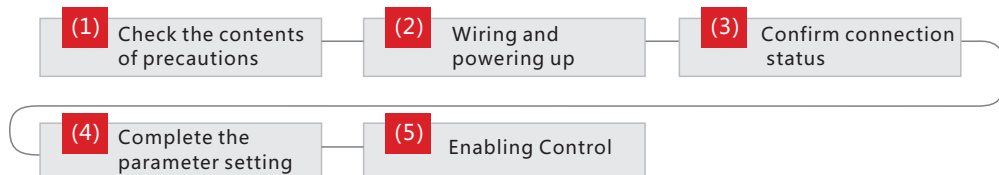
FMC4030

三轴运动控制系统 THREE-AXIS MOTION CONTROL SYSTEM 通用触摸屏使用说明书 UNIVERSAL TOUCH SCREEN INSTRUCTION

使用指南手册版本: V 1.0

**INSTRUCTION
MANUAL**
FUYUTECHNOLOGYCO.,LTD

C.Operational steps and instructions



1)Check the contents of precautions

Check the software version and the possible controller firmware upgrades in the first two steps of Chapter 2, “Before Using”.

2)Wiring and powering up

When FMC4030, touch screen, driver, module, power supply and other wiring are all powered on, connect the communication line of the touch screen to the COM port of the FMC4030.

3)Confirm connection status

The touch screen will start up and display the main interface as shown below when it is powered on. You can switch between Chinese/English by clicking the language option in the upper left corner.



Main interface

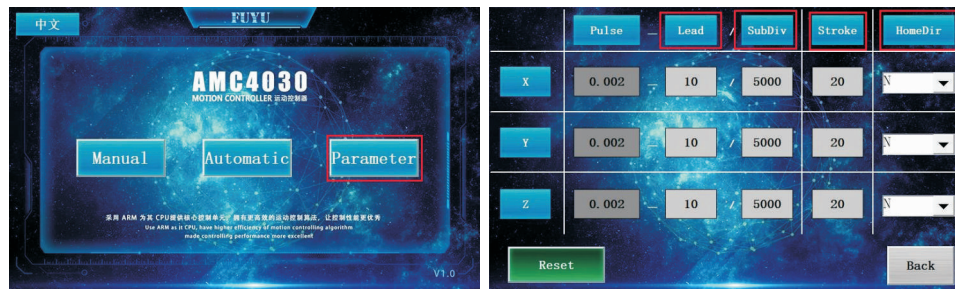
If the dialog box shown below pops up, please check if the communication line is connected or the three indicators of the FMC4030 controller are normal (the middle light flashes and the rest is always on).



“Status not connected” dialog

4) Complete the parameter setting

As shown in the figure, when the touch screen is energized and the connection status of the FMC4030 controller is normal, we can see the button of parameter setting in the main interface of the touch screen. After the first use and each replacement of the new module, please enter the parameter settings to set up after power-on. Only in this way the exercise can be carried out effectively.



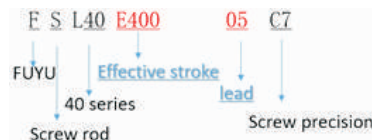
Click "Parameter"

Parameter setting interface

Parameter instruction is as follows:

1. Impulse Equivalent Meaning: The controller sends a pulse to drive, which drives the motor to rotate and makes the sliding table move forward. Therefore, if the pulse equivalent setting is wrong, the control distance will be wrong.
2. Lead: If the screw is straight, fill in the corresponding lead. If it is a belt module, the filling gear circumference (80 belt 165, 60 belt 135, 100 belt 89.95).
3. Travel: Fill in the valid itinerary of the corresponding module.
4. Where are the guides and itineraries?

Figure: We have such a label on each module.



F	S	L120	E100	05	C7
公司名称代号 Company name code	丝杆和皮带模组 Screw and belt linear module	型材宽度 Profile width	有效行程 Effective trip	丝杆导程 Effective trip	丝杆精度 Screw accuracy class
富源科技 FUYU	S丝杆模组 Screw linear module	40	50-2000mm 丝杆模组 Screw linear module	05 mm	C5
	B皮带模组 Belt linear module	60	100-3000mm 皮带模组 Belt linear module	10 mm	C7
	PS精密丝杆模组 Precision screw	80	(依客户要求定制生产) Customized production (customer requirements)	16 mm	
	DB双导轨皮带模组 Double rail belt	100		20 mm	
	HS手轮丝杆模组 Hand wheel screw	120			

Then set the "return to zero direction" (N/P). Please connect the controller and debug it. In short, the return to the origin is in the direction of the origin switch. The next step can be controlled only when the parameters have been set up right.

5) Enabling Control



Manual control:



A Click "Manual"



Manual operation interface

1.Manual operation instructions:

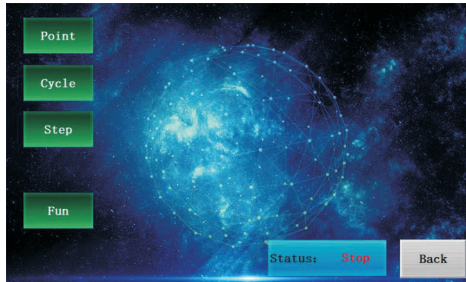
- Manual control operations can only be performed without automatic control.
- Set the "Manual Speed" and "Acceleration" first, and then you can manually operate on the XYZ three axes.
- When need to use the step function, please click the green box next to the step distance. After selection, click X + or X-, and the motor moves the set step distance.
- The purpose of the out port is to switch the controller's default high level out output to low level output. You can see the operating instructions of FMC4030 software for specific use methods.

Note: All display boxes are blue, the keys are all green, press and then they become Orange red, the stop keys are all red.

Auto-control



Click "Automatic"



Auto-control interface

Click "Automatic", then there will be four different motion control modes above, "point Motion", "Cycle Motion", "Step Motion" and "Function". As shown above. **It can be used without computer programming, but it requires customers to complete the setup of key parameters according to their needs.**

2.Automatic control steps:

- Before using, the "Parameter" on the main interface must be set correctly.
- Select the motion mode you need, and the button status will be displayed in red after clicking.
- Select the axis you need, and the button status will be displayed in red as well.
- Set up the parameters you want, the minimum unit of velocity is 1 and the minimum unit of distance is 0.1.
- Choose the direction. Note: The "back to origin direction" in the default "Parameter " can be defined as the opposite direction.
- After setting parameters, please click "Reset" before "start". If you find that the actual motion is wrong, please check whether the direction is wrong and whether the origin switch is installed appropriate.
- Note1: Manual control operations can only be performed without automatic control.
- Note2: Switching the sport mode needs to stop the motion first.

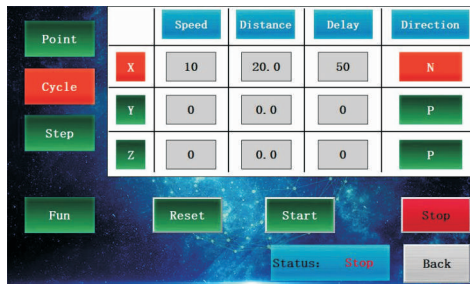
3.Invoke program steps:

- This model was originally designed to allow customers to execute their own program which was written on the PC side and imported into the FMC4030 controller.

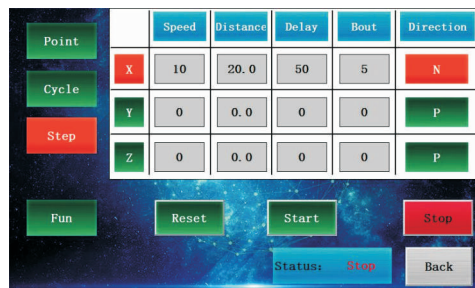
Interfaces of several motion mode :



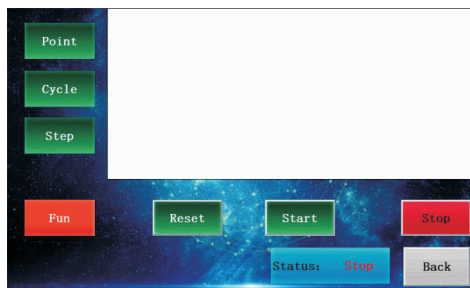
Point to point motion mode



reciprocating motion mode



Step motion



Invoke program mode

D. To users

First of all, thank you very much for trusting our products. If you have any unresolved problems or bugs when using this software, you can contact with our technical support staff directly, we will be very grateful for your suggestions.

If you want to know more about us, you are welcome to visit our company's official website directly. If you have any comments or suggestions about our company's products, you are also welcome to leave a message on the company's official website or contact with our technical support staff.

2)Before execution, you must ensure that there is a program in FMC4030 controller.

3)You should click on the axis you need to move in the motion mode.

4)Click "Start" to execute the program, and click "Stop" to stop.