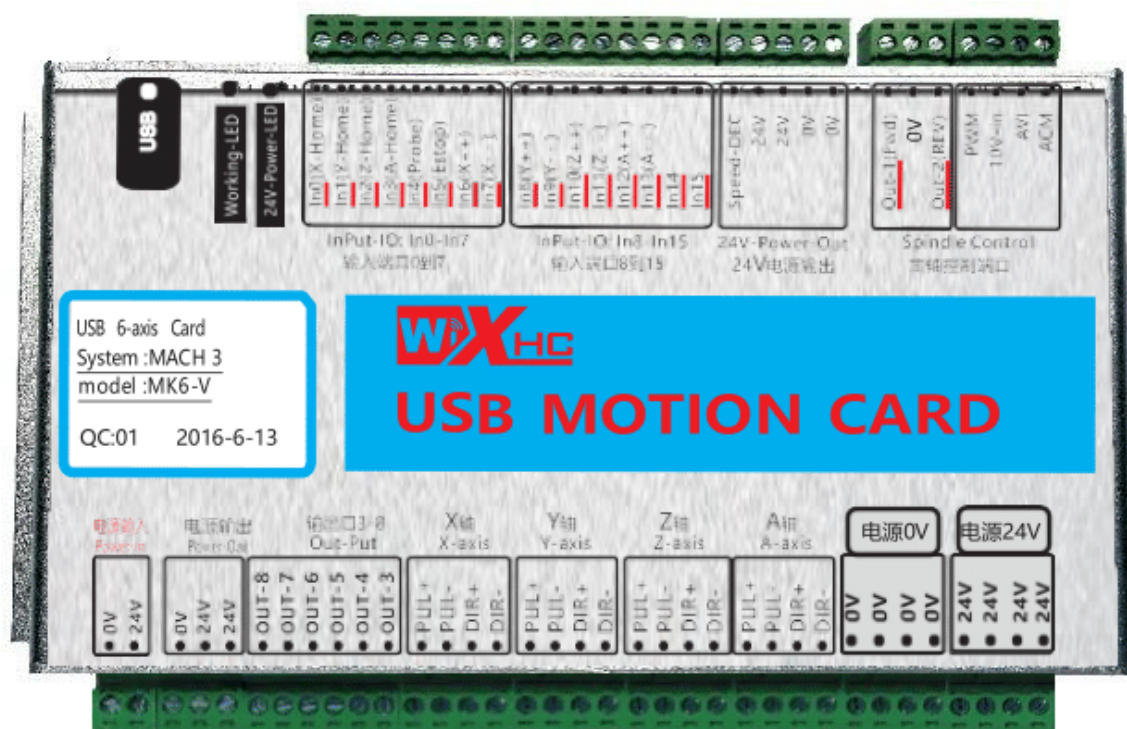




MACH3

MKX

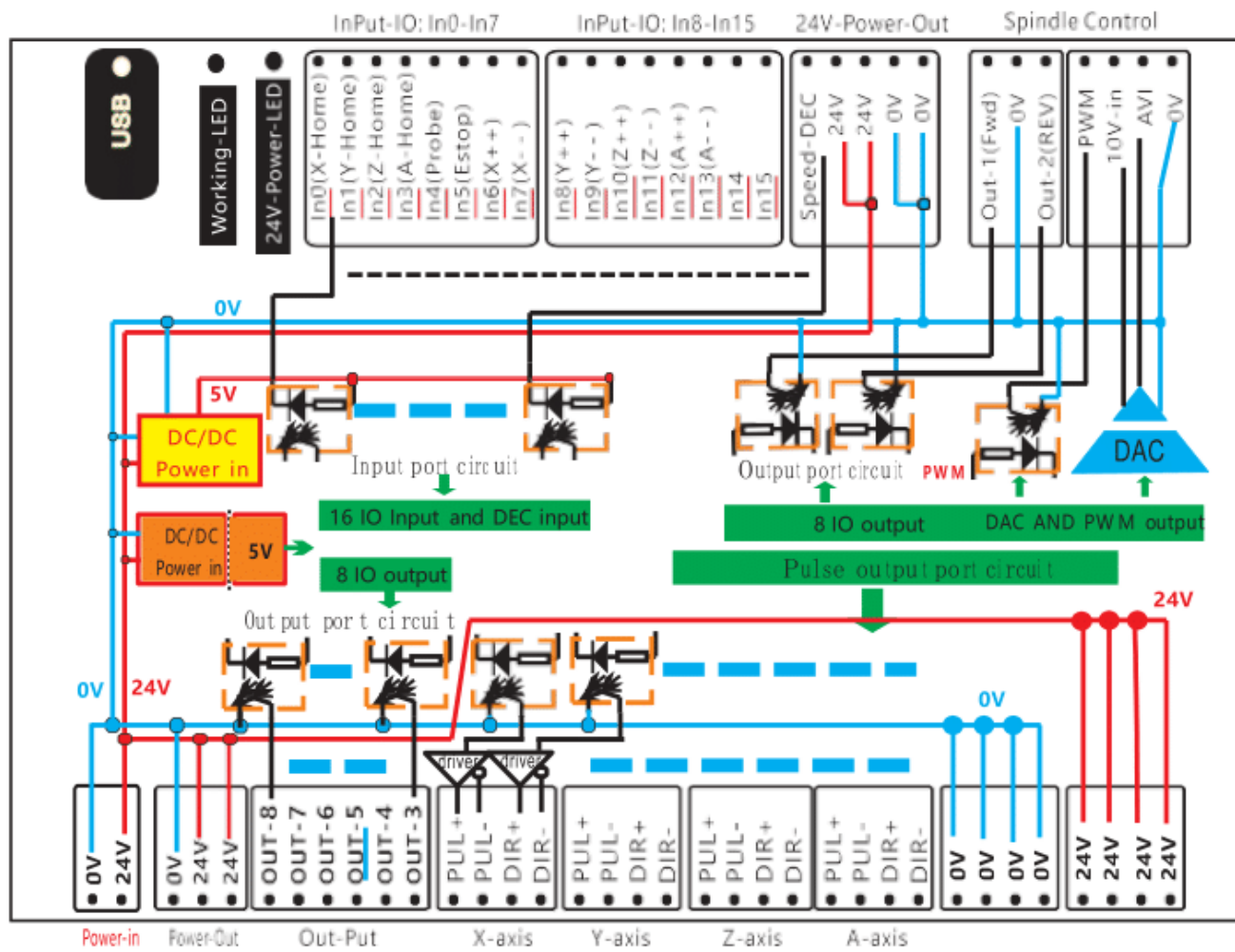


184 x127x30 mm

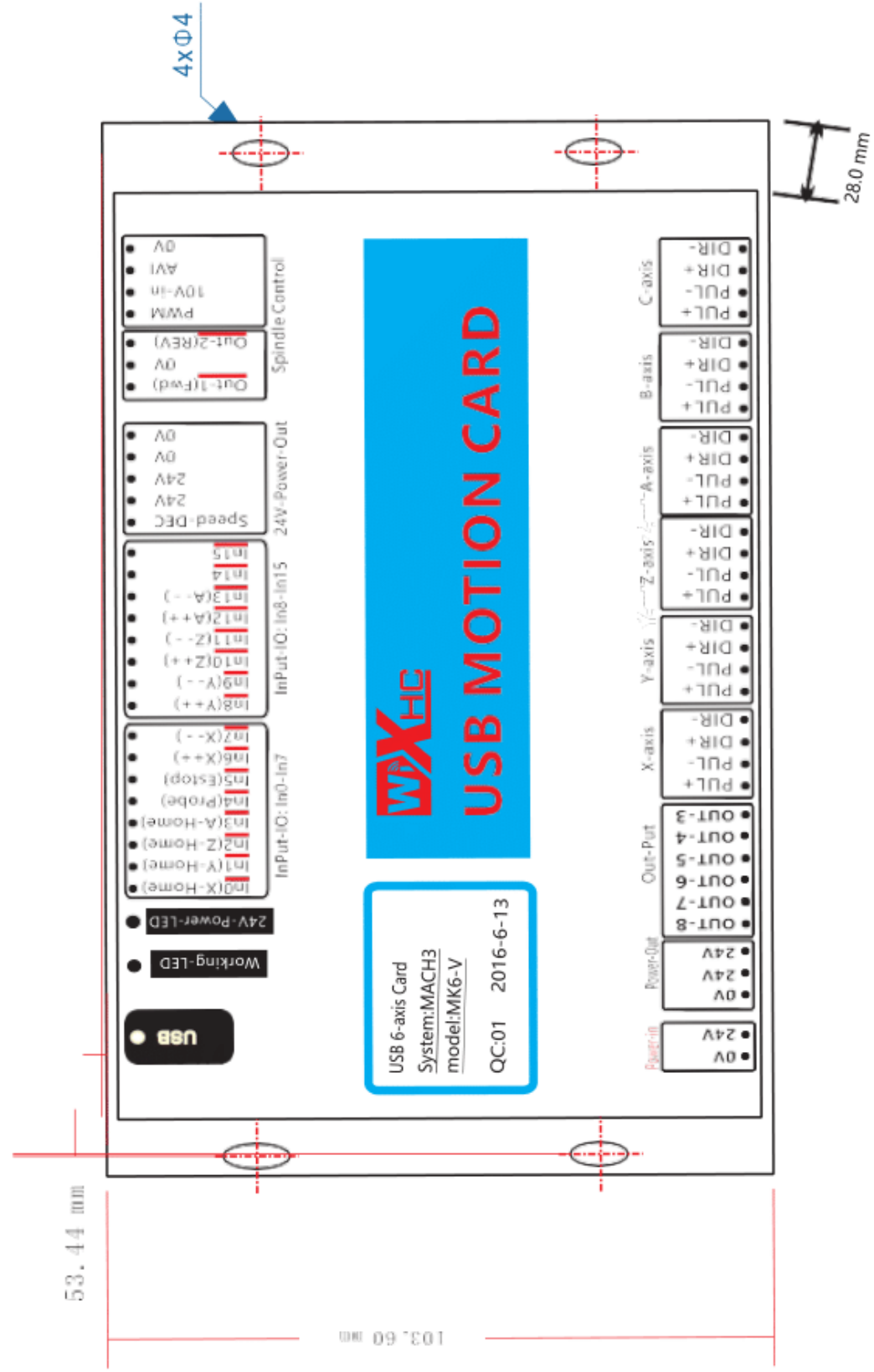


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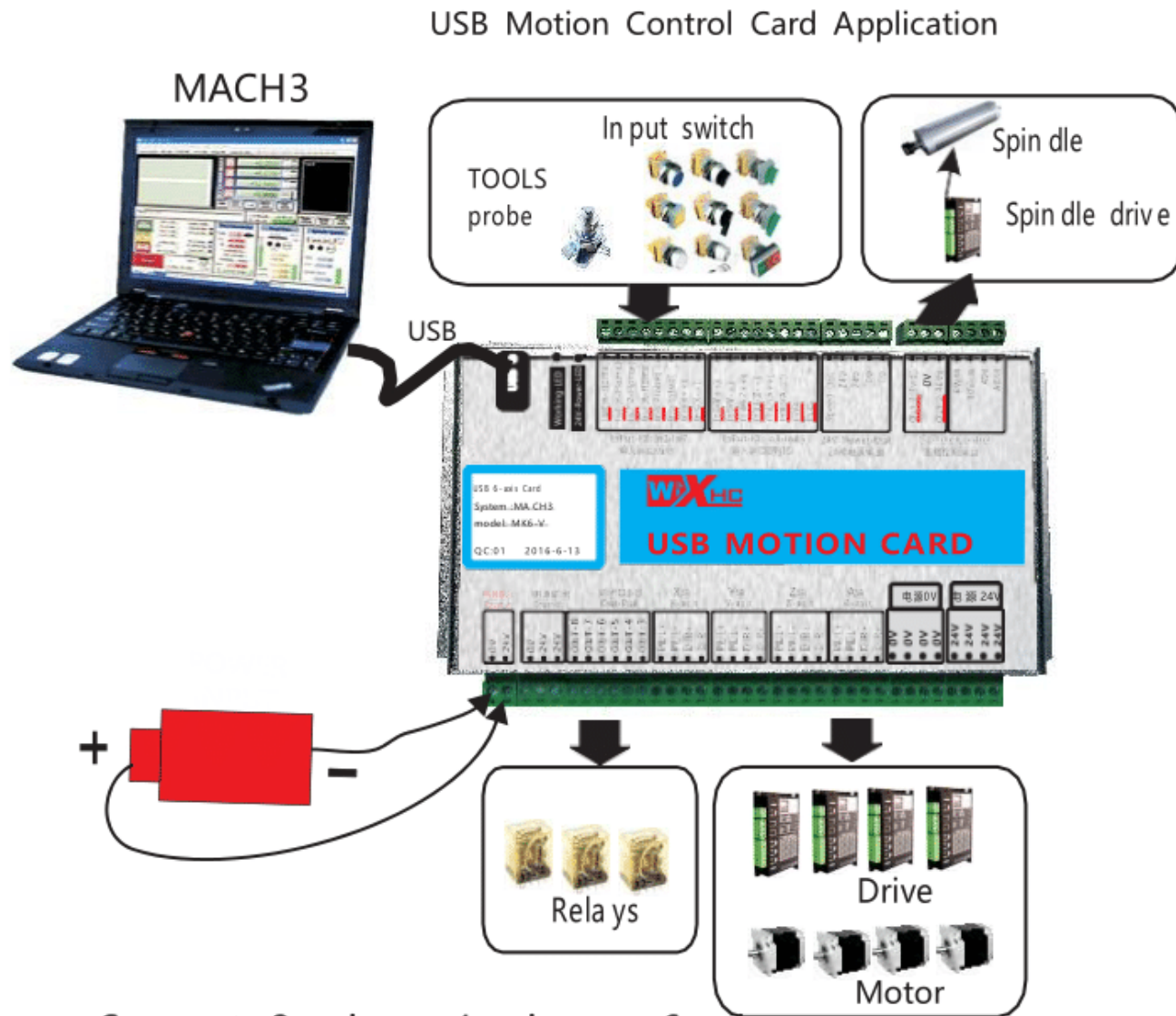
schematic diagram



Features:

- ★ Fully supporting all Mach3 versions
- ★ Full support for USB hot-swappable, the card is Monitoring
USB connection status at any time.
- ★ Supports Up 6-axis
- ★ Maximum step-pulse frequency is 2000KHz
- ★ Status indicator LED can be useful to show the USB
connection, and working status by flashing.
- ★ 16 general-purpose input,8 output
- ★ has speed function, the spindle actual speed Mach3
interface in real-time display
- ★ all IO-port isolation, interference, stable performance
- ★ Support spindle speed feedback
- ★ Support save data when power off

Application Connection Diagram



Support: 3-axis or 4-axis, or 6-axis

Mk3-V: 3-axis; Mk4-V: 4-axis; Mk6-V: 6-axis

English Introduction Signal Description

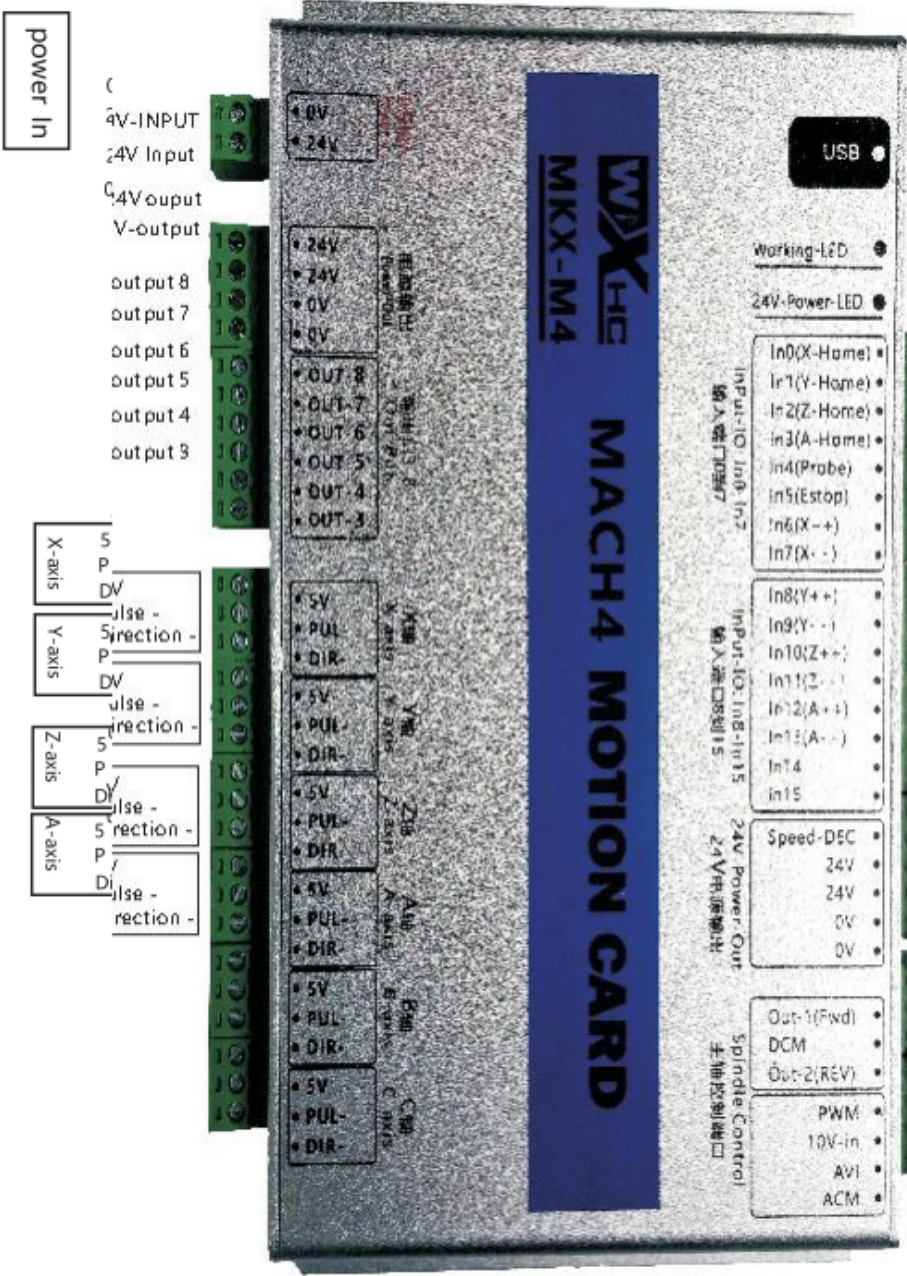
To increase the Anti-interference, please contact the machine bed PE

Flash: that is working properly, low flash, driver is not installed properly
 Off: The USB connection is not normal

Working LED
 24V-Power-LED
 PE:Protect is home(input-#0)
 is home(input-#1)
 X-axis home(input-#2)
 Y-axis home(input-#3)
 Z-axis z(input-#4)
 A-axis #5
 Prot #6
 input-#7
 input-#8
 input-#9
 input-#10
 input-#11
 input-#12
 input-#13
 input-#14
 input-#15
 input
 output
 output
 24V
 0V
 Forward: output 1
 Initial Ground
 Reversion: output 2
 Forward
 Digital WM output
 Reverse
 Frequency Control Input : 0-10V
 5V Frequency
 DC
 Analog ground
 Analog

16 Input port

Spindle control



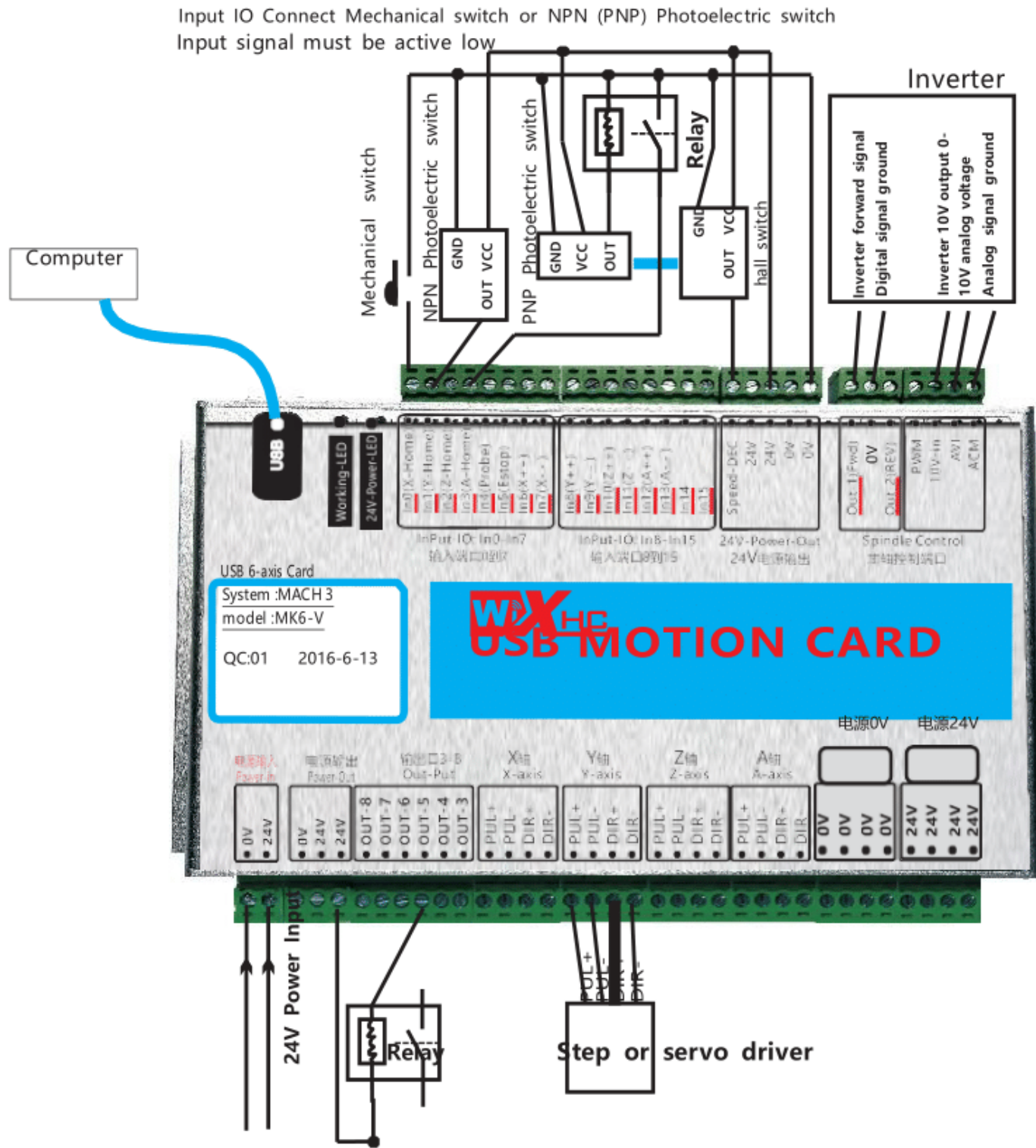
power In

X-axis
 Y-axis
 Z-axis
 A-axis

English Introduction

Wiring diagram shows

NOTE: If the inverter is turned on, the control card is not working properly because of interference caused by the inverter; Replace inverter.



第2部份：英文介绍/ English Introduction

Electrical Characteristics

	Parameter Description	
axis output control:	Drive Current	Isolated open collector output; 5V, 20mA
	Drive	Pulse + direction output
	Output frequency	2000KHZ
	axes	MK3-M4:3-axis;MK4-M4:4-axis;MK6-M4:6-axis
	Isolation Voltage	3.5KV
Spindle inverter output: 3 types of output modes	Analog voltage output	0—10V
	PWM output	5V,1KHZ, Duty;0-100%
	Pulse+direction output	5V,15HZ to 4KHZ
8 IO output	Drive Current	Isolation:50mA, 25V
	Isolation Voltage	3.5KV
16 IO input	Input Current	Isolated inputs, 5 mA, maximum voltage 25V
	Isolation Voltage	3.5KV
USB interface	Complies with USB2.0 standard	

- No.1: Install MACH3 software

- No.2: copy drive to the specified MACH3 directory see the disc information:..\English Manual\usb card driver\readme.txt

- No.3: See wiring diagram, which will control the card connection correctly

- No.4: Connect the control card and computer with the USB line.

To complete the above steps, you can open the MACH3 software, and use.



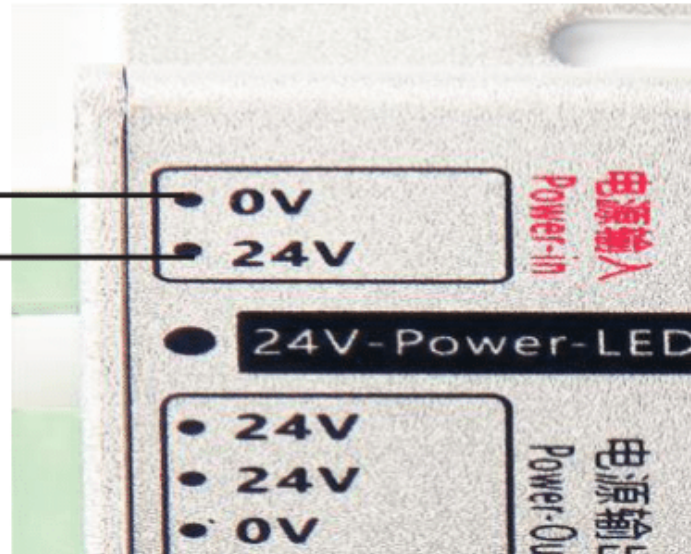
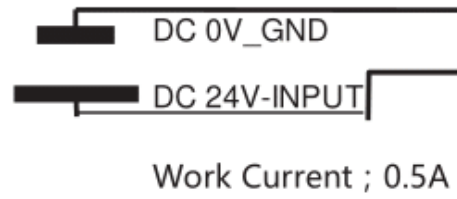
See print Manual: "MACH3 parameter setting", adjust the parameters such as pulse equivalent set

(Annex 2:Wiring schematics)

MKX Wiring schematics

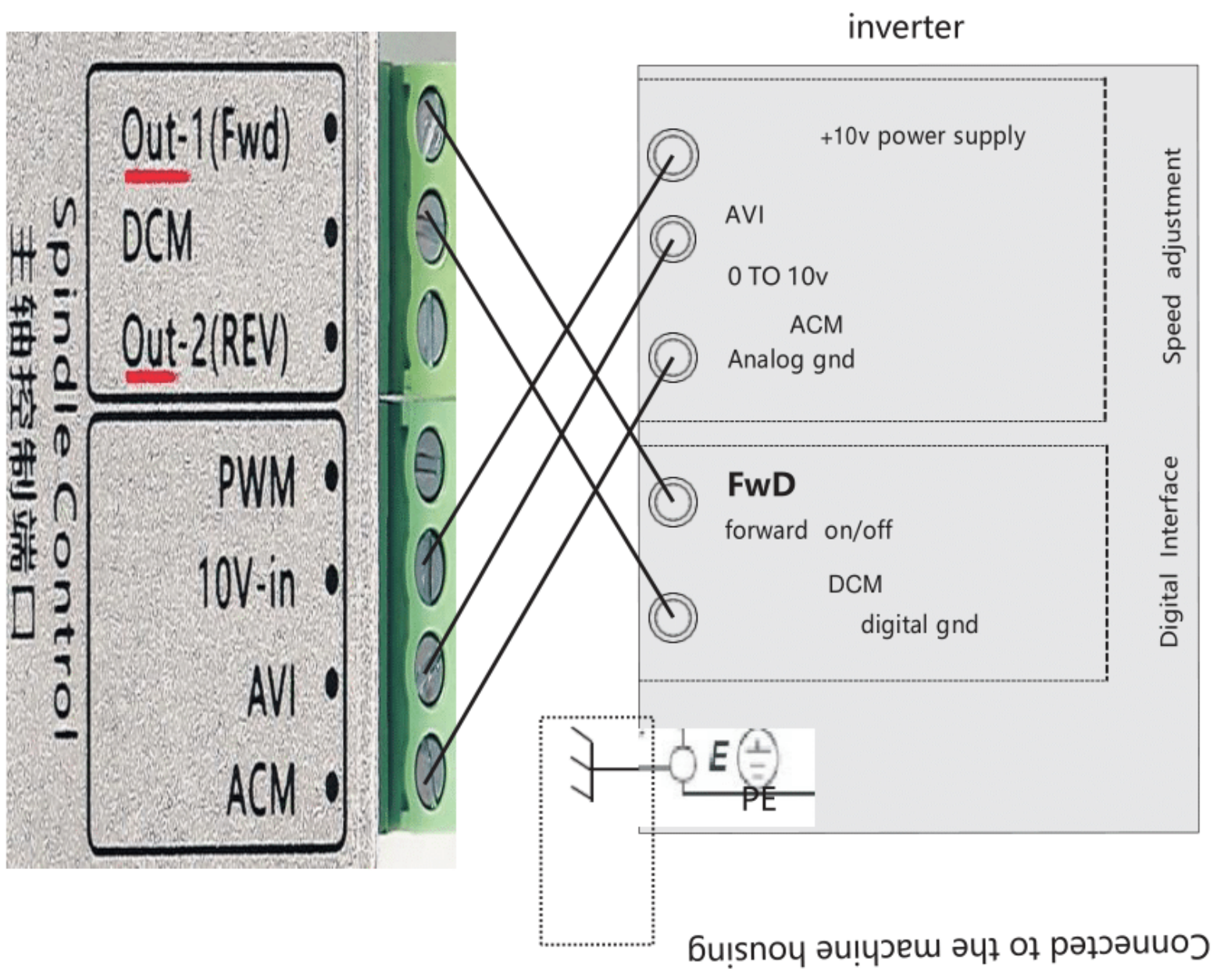
NO.1 : power input

power : 24V,0.5A

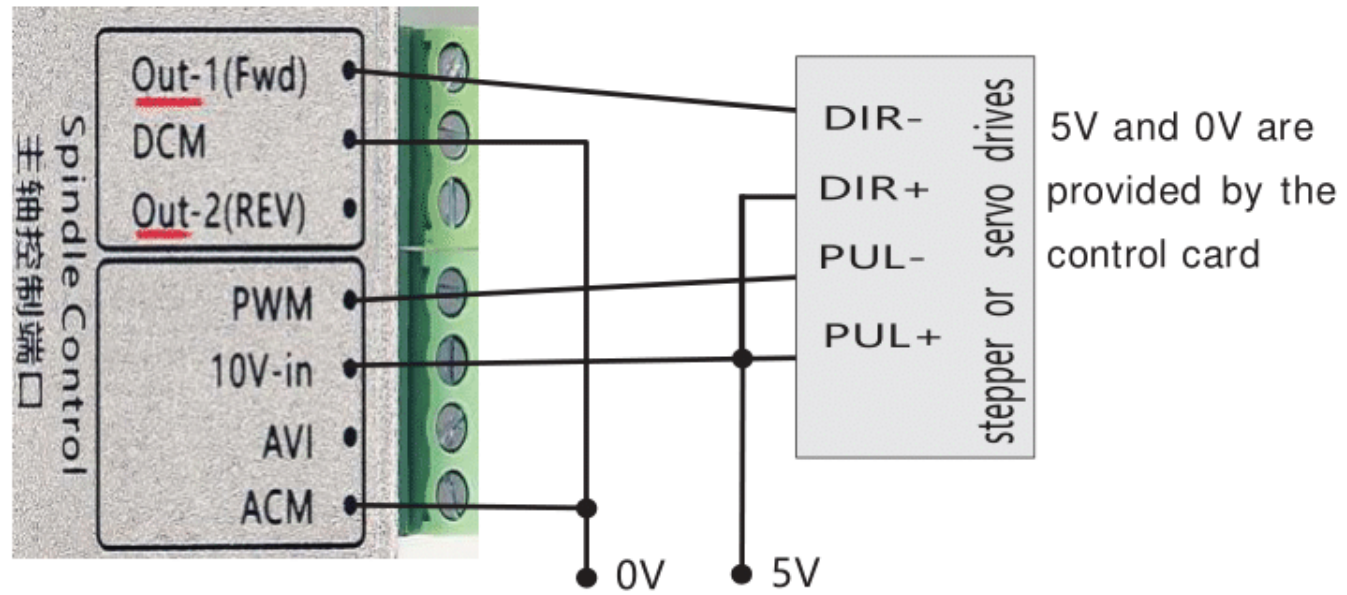


2.NO.2 Drive Interface : Supporting servo or stepping drive

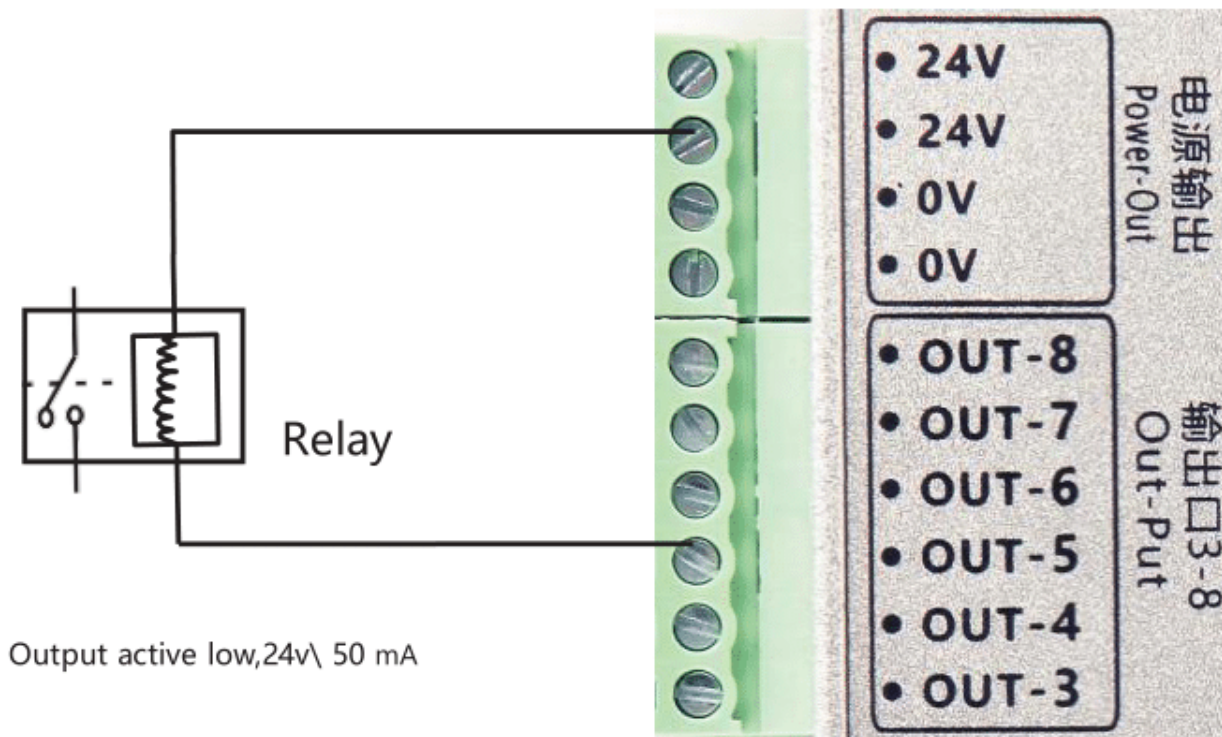
NO.3 Inverter Interface



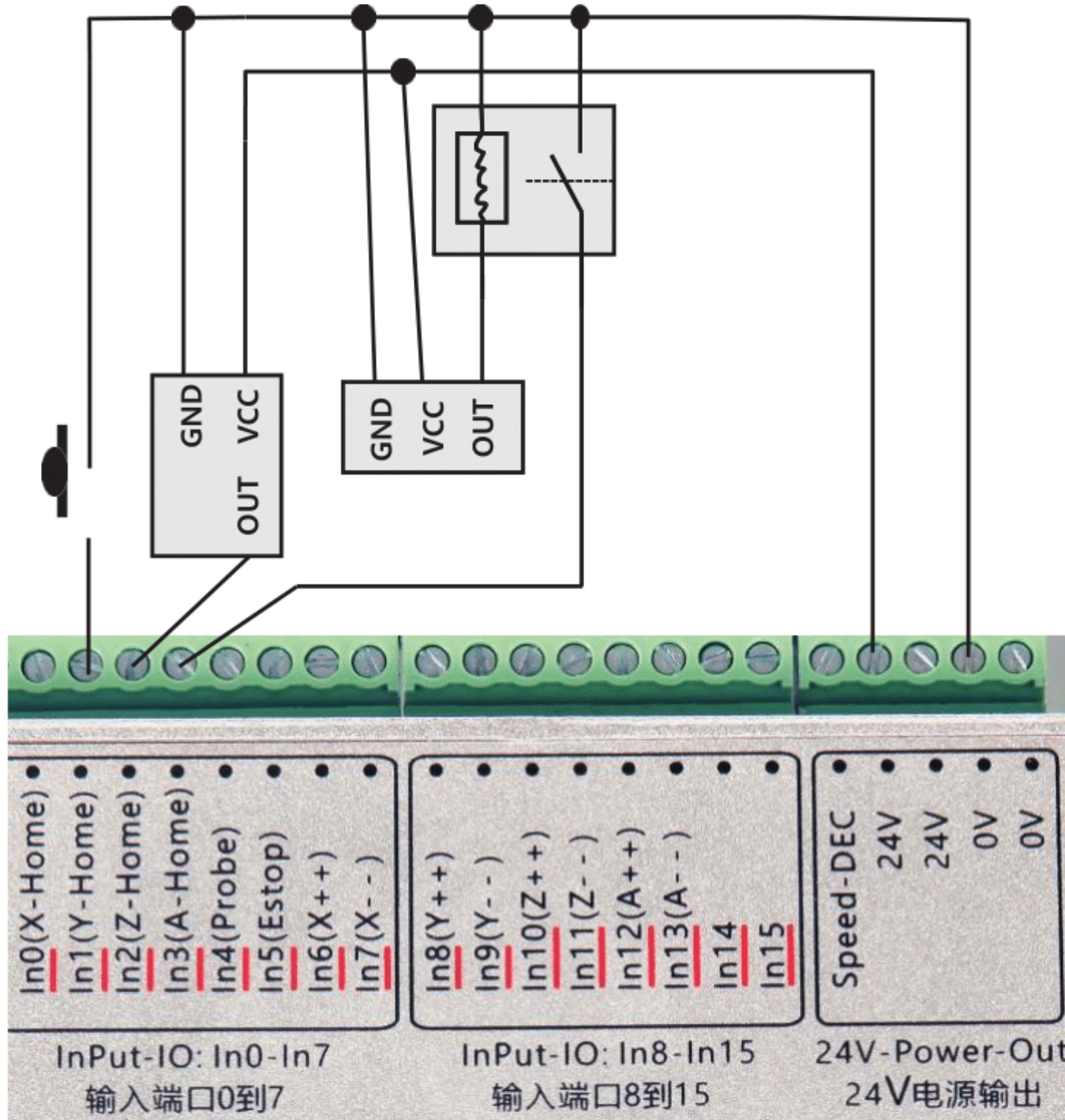
Spindle connected stepper or servo drives



NO.4 : Relay Interface : OUT2 to OUT7 Relay Interface

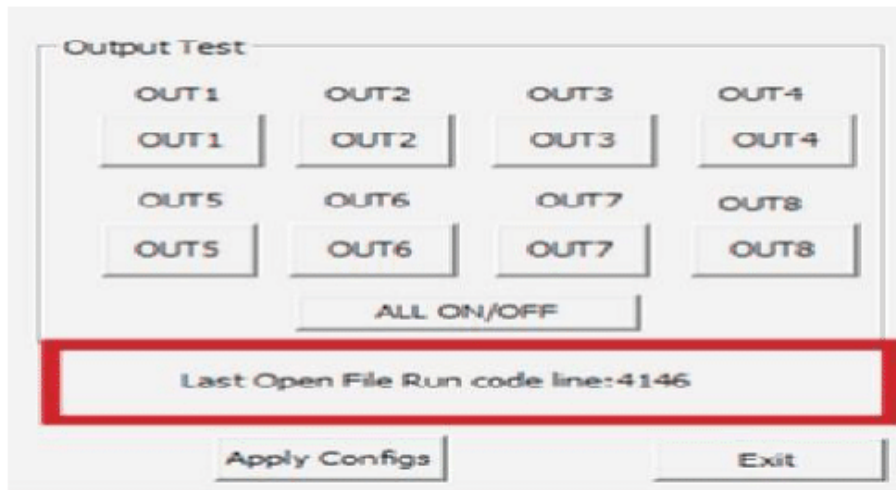


NO.5 : input Interface : 15 input port;In0 to In15.Active Low

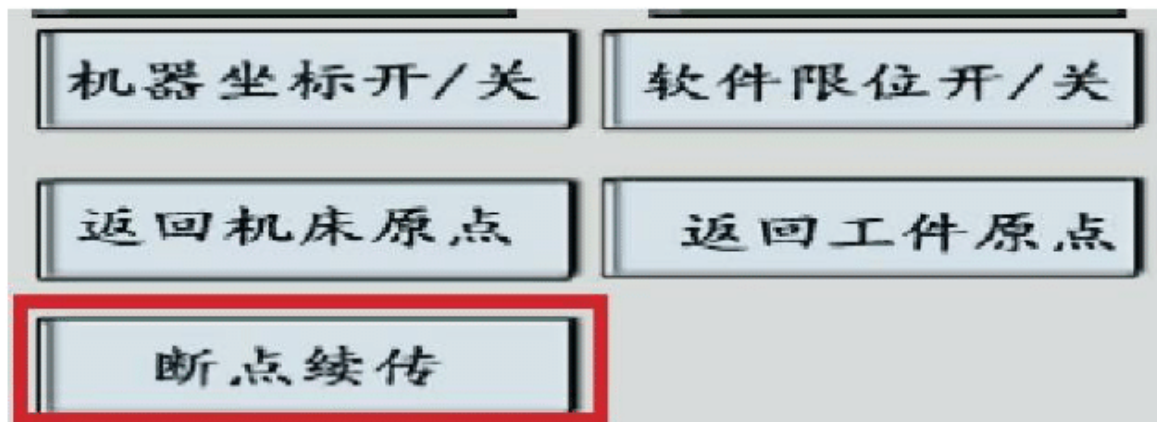


New features

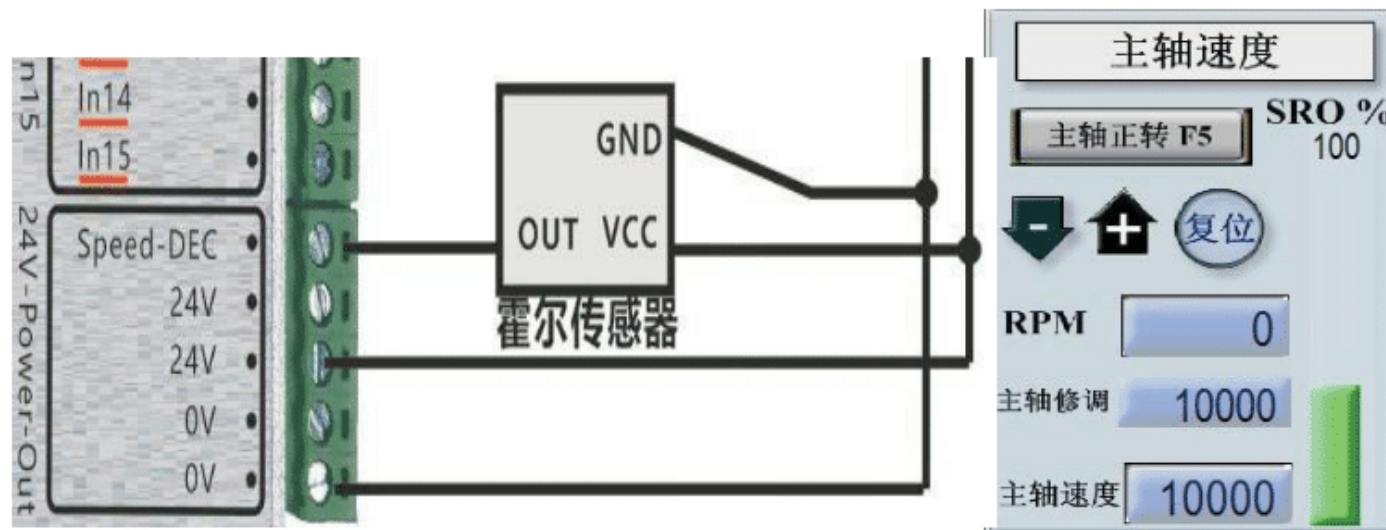
Break continue: when the control card suddenly power off, the control card chip automatically save the current G code line number. Control card plug-in display save the number of lines.



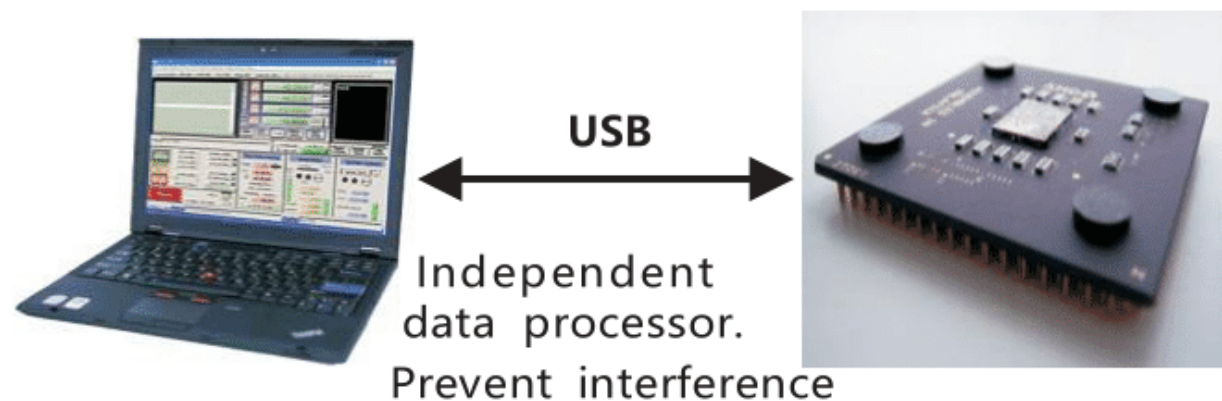
Wait until the control card is connected to the power supply next, load the G code program, click the power to continue to the break continue button, Mach3 software automatically from the last save the number of lines to start running.



Spindle speed feedback: spindle speed feedback through the sensor feedback to Input port "Speed-DEC" , and then display the RPM speed on the Mach3 software. Maximum support feedback inputPulse frequency 20KHZ.



USB anti interference: the new design of the independent USB data processor, to prevent the interference of USB communication, more stable and reliable.Suitable for plasma cutting and automatic welding and so on.





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