Manual for marking while rotating card

catalog

1. Software

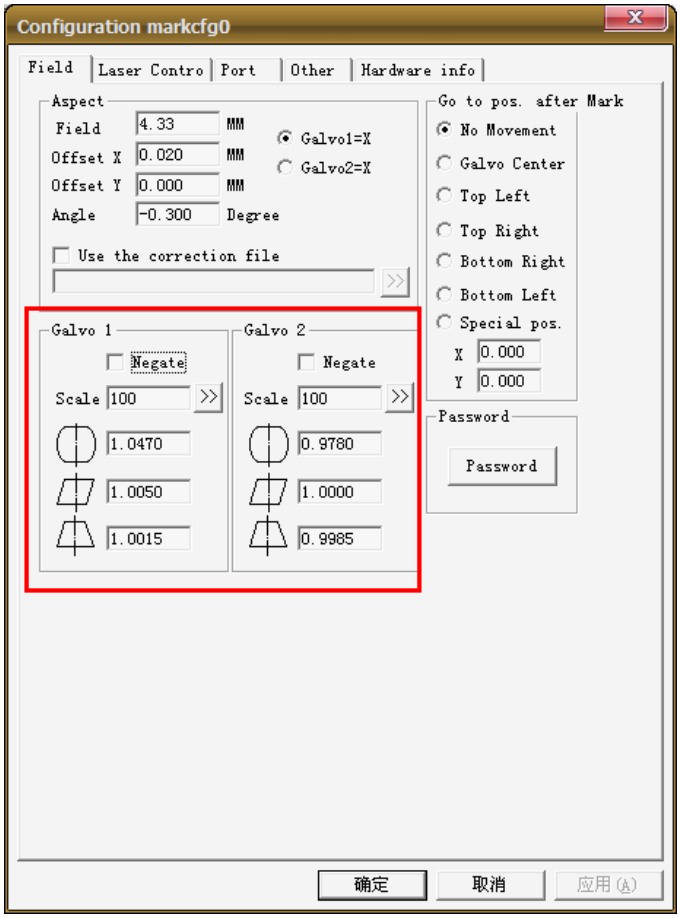
Notes: use standard EZCAD software with it, and please use inside calibrate as bellow:

1. Draw a cross in the ezcad, click mark, check the marking result; if the result is a line, please rotate the rotary 90 degree, and try again. If the result is a cross, please do step two.

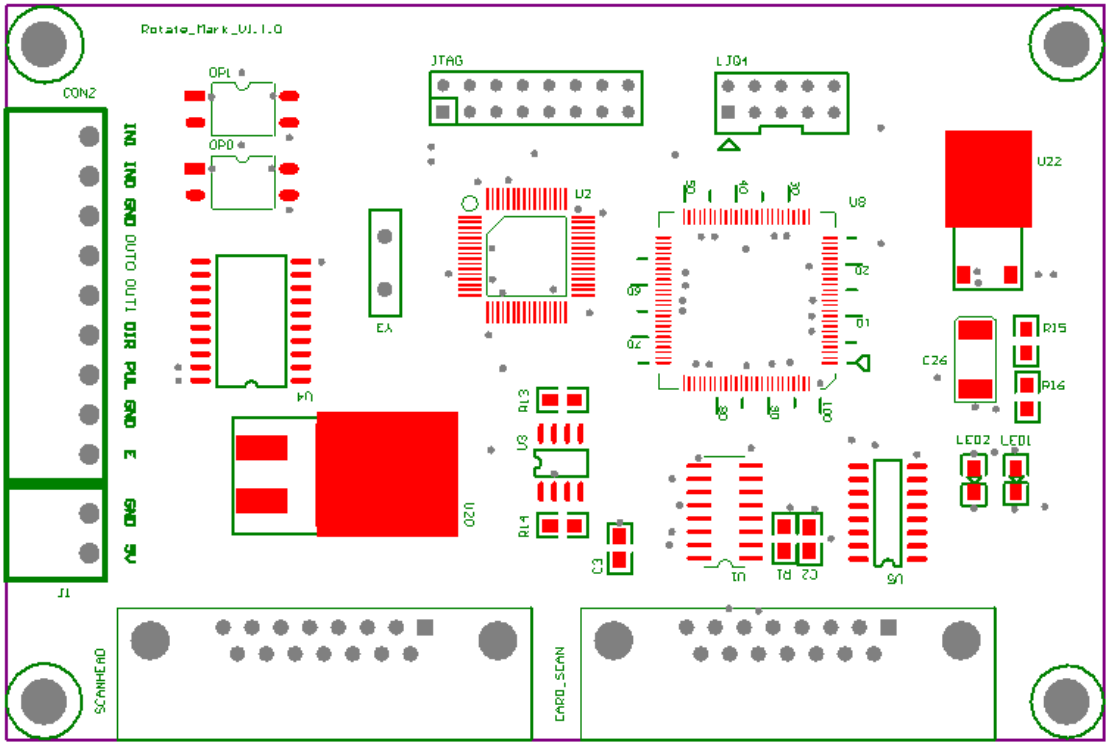
2. Draw a rectangle in the ezcad, set the proper pulse on rotary driver: If you're marking result has break line, please increase the pulse; if you're marking time is too slow, and please decrease the pulse.

3. Measure the rectangle's size, (too much pulse will cause the rectangle's x constringent) if the actually size is different from the software's size, change the galvo x, y parameter (in param (F3)) to adjust the size.

4. The motor will replace one axis(X axis or Y axis), so the speed of scanhead can't too high(less than 100mm/second), and the Jump Speed must be slow, otherwise the motor can't follow the speed of scanhead.

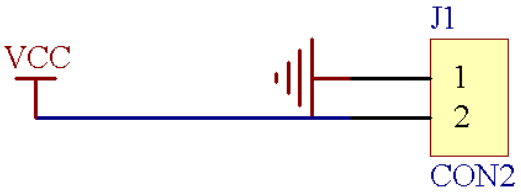


2. Hardware



2.1 J1: power supply

We suggest +5V3A power supply, and supply from J1.

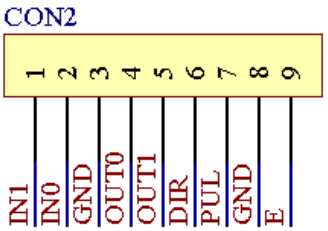


J1	Name	Remark
1	GND	Ground, The negative end of the power supply.
2	VCC	+5V, The positive terminal of the power.

2.2 Con2: signal interface

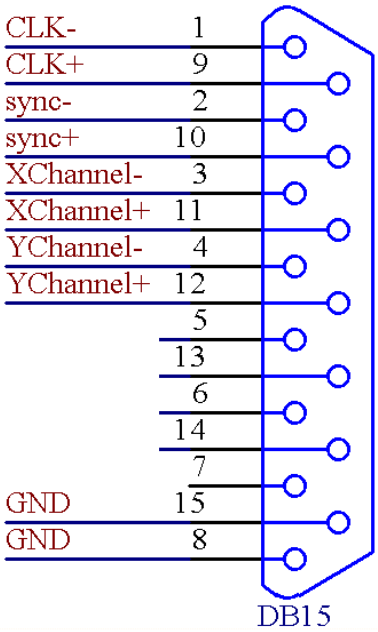
The board control the marking mode by connecting IN0 with GND or connecting IN1 with GND.

Marking mode	The input port that connecting the GND	instruction
Normal marking	Do not connect	If do not connect input port, then it will work like normal marking.
Marking while rotating	IN0	Short (connect) IN0 and GND, it will work in marking while rotating mode. Support bitmap, vector file, text and so on.



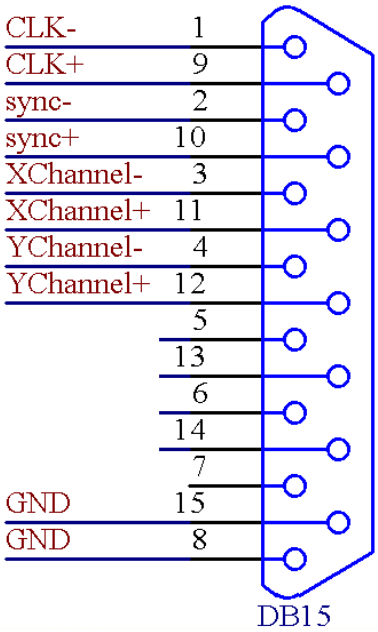
CON2	name	instruction
6	DIR	Director signal, positive output.
7	PUL	Pulse signal, positive output.
3,8	GND	GND signal
9	E	Connect to earth.
2	IN0	Switch normal marking and marking while rotating.
1	IN1,	Switch scanning marking and marking while rotating.
4, 5	OUT0,OUT1	reserve

2.3 SCANHEAD: scanhead signal interface



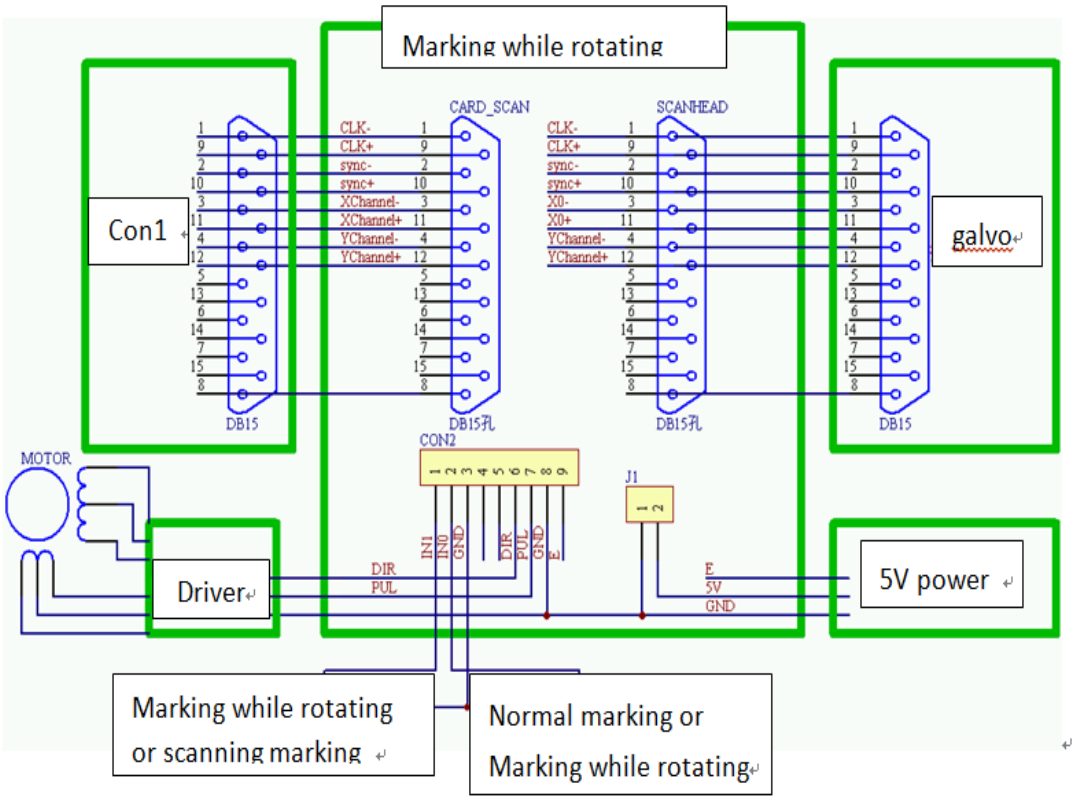
Pins	Name	Remark
1,9	CLK- /CLK+	Clock signal-/Clock signal+
2, 10	SYNC- /SYNC+	Synchronization signal-/Synchronization signal+
3, 11	XO- / XO+	Scanhead signal X-/Scanhead signal X+
4, 12	Y Channel - / Y Channel +	Scanhead signal Y-/Scanhead signal Y+
5, 13	NULL	Reserved
6, 14	NULL	Reserved
7	NULL	Reserved
8, 15	GND	Reference signal

2.4 CARD_SCAN: marking card scanhead interface



Pins	Name	Remark
1,9	CLK- /CLK+	Clock signal-/Clock signal+
2, 10	SYNC- /SYNC+	Synchronization signal-/Synchronization signal+
3, 11	X Channel- / X Channel+	Scanhead signal X-/Scanhead signal X+
4, 12	Y Channel- / Y Channel+	Scanhead signal Y-/Scanhead signal Y+
5, 13	NULL	Reserved
6, 14	NULL	Reserved
7	NULL	Reserved
8, 15	GND	Reference signal

3. Connection



Physical map