

**Zigzag Stitching Machine
Electronic Control System**

Consew 2073R-DSM

User Manual

Hardware

Interface

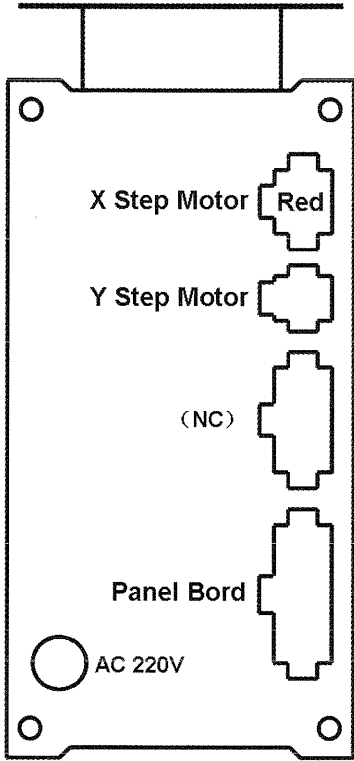
Patterns Chart

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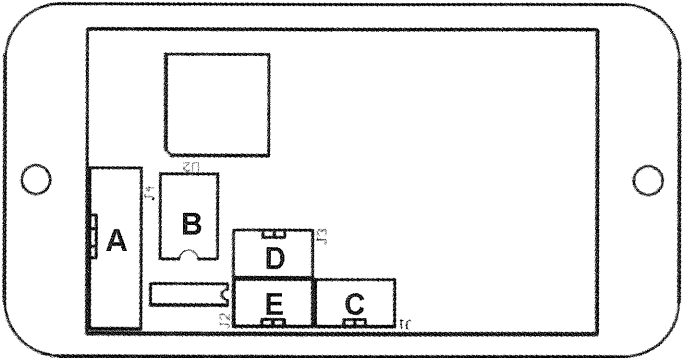
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3 Hardware Instruction

3.1 External Interface of Ctrl-Box



3.2 Panel-Board Interface



Panel-Baord

Socket /IC	Description
A (J4 White 7-Pins socket)	To control box Signal socket
B (U2 pattern chip)	Custom pattern chip
C (J1 Red 3-Pins socket)	X motor zero sensor socket
D (J3 White 3-Pins socket)	Syn sensor socket
E (J2 Black 3-Pins socket)	Y motor zero sensor socket

Notice: When Custom pattern chip removed, the system can still work normally! But only keep own patterns, customized patterns will no longer exist, pattern width is default 8.0 mm at the same time, can be changed only when setting, cannot be saved after the power off.

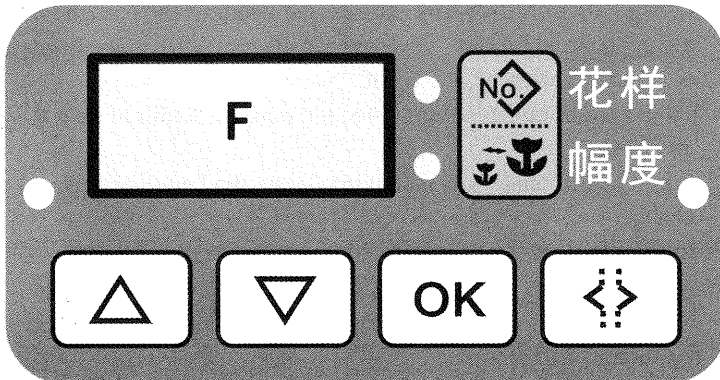
3.3 Power specification

Supply voltage: Single-phase, AC 220 V +/- 20%






Operating Current: Average Current is less than 1.2 A, Peak Current is less than 2 A.

4 Interface and instructions

4.1 Interface specification



Panel interface

key/window	Description
F (Display window)	By three red LED display
	Pattern Width、 Pattern No. and Stitch Length selection Key
	Add Key
	Dec Key
OK	Confirm Key
	Pattern image mirror Key
	Indicator light, indicates Pattern Width、 Pattern No. or Stitch Length

4.2 Operating instructions

- 1、 System allows clients to 4 items change operation: Pattern No.、 Pattern width、 Stitch Length and Pattern Mirror, The Pattern No.、 Pattern width、 Stitch Length by selection Key selected first, and the corresponding indicator light display.
- 2、 For OK key, the user to change pattern No, pattern width, Stitch Length and pattern mirror, all need to press the it to confirm.
- 3、 Each press OK Key, the system will go to Zero point. The system will automatically go to zero one time after power on.
- 4、 When Pattern Mirror Key pressed, the width of the pattern will show a "r", again according to the "r" disappear. Pattern Mirror operation is real-time, is not saved after the power off.
- 5、 Pattern width range is from 0.0 to 9.0 mm, the width of each 0.1 mm can be changed.
- 6、 Stitch length range is from 0.0 to 5.0 mm, the length of each 0.1 mm can be changed.
- 7、 System Pattern No. from 1 to 300 variable (System specifications different, pattern number. is different). Custom Pattern No. from 201 to 230 variable (System specifications different, number of custom Pattern allows to customize different)

4.3 Sensor checking

Press OK key when power on, the system of "PA1" into the interface (Through the \triangle or ∇ key to choose PA1, PA2 and PA3) And then press OK to show the "L" or "H", covering or opening sensor repeatedly, to observe such as "L" and "H" reverse changed, sensor is good, instead of failure. In the condition of "PA1", "PA2" or "PA3" long press OK key to exit. PA1 corresponding X motor sensor, PA2 corresponding synchronous sensor, and PA3 corresponding Y motor sensor.









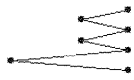





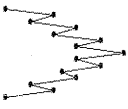


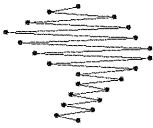





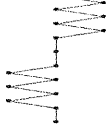






4.4 Alarm

- 1、When the zero sensor failure, motor fault, connection failure, mechanical jammed, and reaction plate specifications or position is not correct, system will alarm "E -1/ 2/3" during power on or pressing OK key.
- 2、When a customer pattern chip does not exist, system does not alarm during power on, system can work normally without custom patterns.
- 3、Synchronous sensor signal is abnormal, the motor will not move, but the system doesn't alarm. System can go to zero normally.

附录 1：单轴系统花样(基本版)

Appendix 1: Single-axis System Pattern (Basic Ver.)

单轴系统花样 (1)
Single-axis System Pattern (1)

花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure
1		11		21	
2		12		22	
3		13		23	
4		14		24	
5		15		25	
6		16		26	
7		17		27	
8		18		28	
9		19		29	
10		20		30	





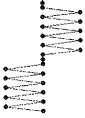










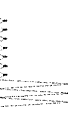














单轴系统花样 (2)
Single-axis System Pattern (2)

花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure
31		41		51	
32		42		52	
33		43		53	
34		44		54	
35		45		55	
36		46		56	
37		47		57	
38		48		58	
39		49		59	
40		50		60	

单轴系统花样 (3)
Single-axis System Pattern (3)

花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure
61		71		81	
62		72		82	
63		73		83	
64		74		84	
65		75		85	
66		76		86	
67		77		87	
68		78		88	
69		79		89	
70		80		90	

单轴系统花样 (4)
Single-axis System Pattern (4)

花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure
91		101		111	
92		102		112	
93		103		113	
94		104		114	
95		105		115	
96		106		116	
97		107		117	
98		108		118	
99		109		119	
100		110		120	

单轴系统花样 (5)

Single-axis System Pattern (5)

花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure
121		131		141	
122		132		142	
123		133		143	
124		134		144	
125		135		145	
126		136		146	
127		137		147	
128		138		148	
129		139		149	
130		140		150	

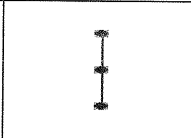
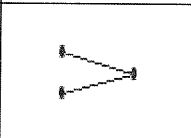
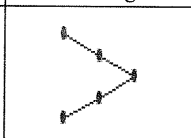
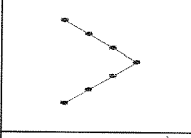
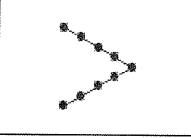
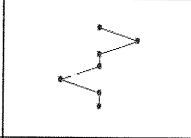
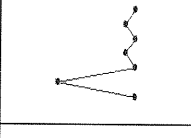
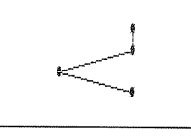
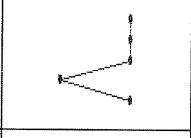
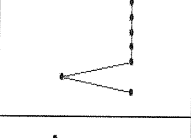
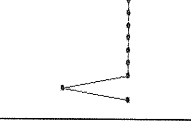
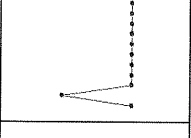
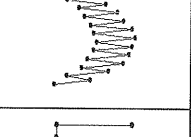
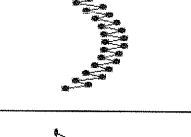
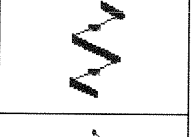
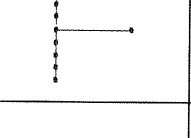
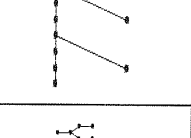
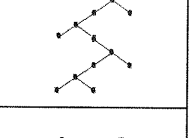
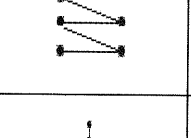
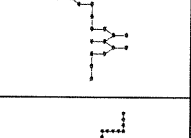
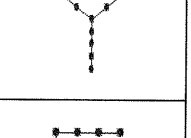
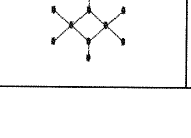
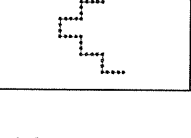
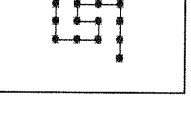
单轴系统花样 (6)
Single-axis System Pattern (6)

花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure
151		161		171	
152		162		172	
153		163		173	
154		164		174	
155		165		175	
156		166		176	
157		167		177	
158		168		178	
159		169		179	
160		170		180	

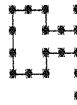

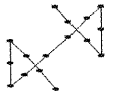


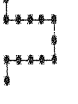





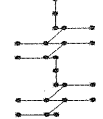

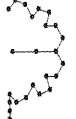




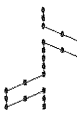









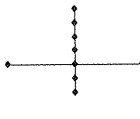
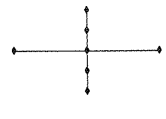
附录 2：双轴系统花样(基本版)

Appendix 2: Double-axis System Pattern (Basic Ver.)

双轴系统花样 (1)
Double-axis System Pattern (1)

花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure
1		2		3	
4		5		6	
7		8		9	
10		11		12	
13		14		15	
16		17		18	
19		20		21	
22		23		24	

双轴系统花样 (2)
Double-axis System Pattern (2)

花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure
25		26		27	
28		29		30	
31		32		33	
34		35		36	
37		38		39	
40		41		42	
43		44		45	
46		47		48	
49		50		51	
52		53		54	

双轴系统花样 (3)
Double-axis System Pattern (3)

花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure
55		56		57	
58		59		60	
61		62		63	
64		65		66	
67		68		69	
70		71		72	
73		74		75	
76		77		78	
79		80		81	
82		83		84	

双轴系统花样 (4)
Double-axis System Pattern (4)

花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure
85		86		87	
88		89		90	
91		92		93	
94		95		96	
97		98		99	
100		101		102	
103		104		105	
106		107		108	
109		110		111	
112		113		114	

双轴系统花样 (5)

Double-axis System Pattern (5)

花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure	花样号 Pattern No	花样图案 Pattern Figure
115		116		117	
118		119		120	
121		122		123	
124		125		126	
127		128		129	
130		131		132	
133		134		135	
136		137		138	
139		140			

Appendix 3: System specifications and Type

