

SIRUBA


電控參數說明書

ELECTRONIC CONTROL PARAMETER MANUAL

■ 700KQ



安全指示

- 1) 在安裝或使用本產品前，使用者必須詳細閱讀本操作手冊。
- 2) 本產品須由受過正確訓練的人員來安裝或操作。安裝作業時必須關閉所有電源，切記不可帶電操作。
- 3) 所有標有  符號的指示，必須特別注意並按照說明書上的執行，以免造成不必要的損害。
- 4) 為安全起見，禁止以延長線作電源座供應二項以上的電器產品使用。
- 5) 在連接電源線時，必須確定工作電壓符合本產品標識中規定的額定電壓值。
- 6) 請不要在日光直接照射的場所、室外及室溫 45°C 以上或 0°C 以下的場所操作。
- 7) 請不要在暖氣（電熱器）旁、有露水的場所及在相對濕度 10% 以下或 90% 以上的場所操作。
- 8) 請不要在灰塵多的場所、具有腐蝕性物質的場所及有揮發性氣體的場所操作。
- 9) 請注意所有電源線、信號線、接地線等接線時不要受壓或過度扭曲，以確保使用安全。
- 10) 電源線的接地端須以適當大小的導線和接頭連接到生產工廠的系統地線，此連接必須被永久固定。
- 11) 所有可轉動的部分，必須以所提供的零件加以防範露出。
- 12) 在安裝完成第一次開電後，先關閉切線功能以低速操作縫紉機並檢查轉動方向是否正確、運轉是否穩定。
- 13) 在進行以下操作前，請先關閉所有電源：
 1. 在控制箱與馬達上插拔任何連接插頭時。
 2. 穿針線時。
 3. 翻抬縫紉機機頭時。
 4. 修理或做任何機械上的調整時。
 5. 機器閒置不用時。
- 14) 修理或高層次的保養工作，僅能由受過訓練的機電技師來執行。所有維修用的零件，須由本公司提供認可，方可使用。
- 15) 使用本產品請遠離高頻電磁波和電波發射器等，以免所產生的電磁波干擾伺服驅動裝置而發生誤動作。
- 16) 請不要以不適當物體來敲擊或撞擊本產品及各裝置。

保修期限

本產品保修期限為購買日期起一年內或出廠月份起兩年內。

保修內容

本產品在正常情況使用且無人為操作失誤的前提下，於保修期間無償為客戶維修使能正常操作。

但以下情況於保修期間將收取維修費用：

1. 不當使用包括誤接高壓電源、將產品移做其它用途、自行拆卸、維修、更改、或不依規格範圍使用、進水進油及插入異物於本產品。
2. 火災、地震、閃電、風災、水災、鹽蝕、潮濕、異常電壓及其它天災或不當場所造成的損害。
3. 客戶購買後摔落本產品，或客戶自行運輸（或託付運輸公司）造成的損害。

* 本產品在生產及測試上皆盡最大努力和嚴格控制使其達到高品質及高穩定的標準，但外部的電磁或靜電干擾或不穩定的供應電源，仍可能對本產品造成影響或損害，因此操作場所的接地系統一定要確實做好，並建議使用者安裝故障安全防護裝置（如漏電保護器）。

1 · 操作面板按鍵功能說明

序號	圖示	名稱	功能說明
1		功能參數編輯按鍵	1.一般模式介面下，若點擊，進入“使用者參數設置”介面。 2.一般模式介面下，若長按，進入“高級參數設置”介面。 3.參數設置介面下，若點擊，返回主介面。
2		參數查看保存鍵	參數設置介面下，若點擊，保存設置。
3		加鍵	1.參數設置介面下，若點擊，增大參數。 2.一般模式介面下，若點擊，提高運行速度或者增加踏板斜率。
4		減鍵	1.參數設置介面下，若點擊，減小參數。 2.一般模式介面下，若點擊，降低 LED 燈亮度；若長按，進入色系調節。
5		左鍵	左移。
6		右鍵	1.參數設置介面下，若點擊，右移一個位置。 2.一般模式介面下，若長按，進入快捷介面。
7		剪線鍵	1.若點擊，實現：剪線關閉、前剪線開、後剪線開、前後剪線開的迴圈切換。 2.若長按，進入剪線相關參數設置介面。
8		模式選擇鍵	1.若點擊，實現以下 4 個模式的迴圈切換： a.全自動：啟動靠全感應信號完成。 b.自由縫 c.半自動：啟動靠前感應信號+腳踏板完成（與 P-05 項同步）。 d.全人工：啟動靠腳踏板完成。 2.若長按，進入模式相關參數設置介面。
9		吸氣鍵	1.若點擊，實現：吸氣關閉、前吸氣開、後吸氣開、前後吸氣開、長吸氣的迴圈切換。 2.若長按，進入吸氣相關參數設置介面。
10		抬壓腳鍵	1.若點擊，實現：自動抬壓腳關閉、前抬、後抬、前後抬的迴圈切換。 2.若長按，進入壓腳相關參數設置介面。
11		感應鍵	1.若點擊，查看感測器的即時感應值和當前閾值。 2.若長按，進入感測器靈敏度調節介面。 3.在參數模式下，若長按，則將該參數保存為使用者參數模式。
12		布料識別鍵	在主介面下長按進入布料識別模式。
13		恢復出廠設置鍵	一般模式介面下，長按此鍵 3 秒即可恢復出廠設置。
14		指示燈	①F-SENSOR ②M-SENSOR ③B-SENSOR ④STATE 1.前感測器感應到有布時，F-SENSOR 黃綠燈亮，無布時熄滅。 2.中感測器感應到有布時，M-SENSOR 黃綠燈亮，無布時熄滅。 3.後感測器感應到有布時，B-SENSOR 黃綠燈亮，無布時熄滅。 4.縫紉機異常時，STATE 紅燈亮，正常時綠燈亮。

2・特殊功能操作說明

序號	功能名稱	功能說明
1	高級參數模式	在主介面下，長按 P 鍵，進入“高級參數設置”介面（P26）。
2	技術員參數模式	在主介面下，同時按下 P 鍵 + S 鍵，輸入設置密碼後（預設密碼為 0000），進入“技術員參數模式”介面。
3	布料識別模式	第一步：在主介面下長按布料識別鍵，可進入布料識別模式介面； 第二步：請將布移開感應器之後，按 S 鍵； 第三步：選擇布料識別模式之後，按 S 鍵；設置完成。（介面有提示）
4	計件功能	在主介面下，同時按 ✕ 鍵和 ↱ 鍵進入計件介面(P47)。
5	快捷操作介面	在主介面下，長按 → 鍵，進入快捷介面；1、主軸零點角度設置，2、上定位調整，3、開機找上定位，4、縫台保護，5、壓腳保護。

3・系統參數設置說明

序號	項目名稱	範圍	預設值	參數說明
P-01	最高轉速(轉/分)	200-7000	5500	
P-02	停針定位選擇	0-1	0	0：上停針 1：下停針
P-03	剪線速度(轉/分)	200-7000	5200	有剪線功能時：前感測器觸發啟動和後感測器信號結束時（剪線前）的速度設置。
P-04	啟動模式	0-1	0	（全自動模式下有效） 0：自動模式 1：腳控模式（前感應+腳踏板前踏啟動）
P-05	自動半自動模式	0-1	0	（P-06 開啟時） 0：半自動（腳控模式） 1：自動（配合 P-04 使用）
P-06	自動感應開關	0-1	1	0：關閉（全人工模式開啟）； 1：開啟（實現自動/半自動模式，與 P-05 項匹配使用）
P-07	自動剪線	0-3	3	0：關閉 1：前開（中間感測器接收到信號時剪線） 2：後開（後感測器接收信號結束後剪線） 3：前後開
P-08	自動吸氣	0-3	3	0：關閉 1：前開 2：後開 3：前後開
P-09	自動拉布	0-2	0	0：關閉 1：縫中拉布 2：縫後拉布
P-10	自動抬壓腳	0-3	0	0：關閉 1：前開（前感測器接收到信號時） 2：後開（後感測器信號結束時） 3：前後開

P-11	縫中抬壓腳	0-1	0	(全人工/半自動模式下有效) 0：關閉 1：開啟 (停車時自動抬壓腳)
P-12	剪線後抬壓腳	0-1	0	(全人工模式下有效) 0：關閉 1：開啟
P-13	半反踏抬壓腳	0-2	0	(全人工/半自動模式下有效) 0：半反踏&反踏抬 1：不抬 2：反踏抬
P-14	手動吸氣	0-2	1	0：不吸 1：後吸 2：前後吸
P-16	低氣壓模式	0-1	0	0：關閉 1：開啟
P-17	連續縫製開關	0-1	0	0：關閉 1：開啟
P-18	恒速剪線開關	0-1	0	0：關閉 (完成後剪線前不執行 P-03 項的速度) 1：開啟 (前後剪線的速度固定為 P-03 項的速度)
P-19	預留	空	空	
P-20	剪線後停針位選擇	0-1	1	0：下停針 1：上停針
P-21	預留	空	空	
P-22	前接收器 E#開關	0-1	1	0：關閉 (關閉前感測器，腳踏板直接啟動) 1：開啟 (打開前感測器，感測器信號+腳踏板啟動)
P-23	間歇吸氣吸時間 (×100 毫秒)	1-600	20	數位越大時間越長。
P-24	間歇吸氣停時間 (×100 毫秒)	0-600	0	0：為無間歇吸氣 前吸氣關閉時間 (P-46 項設置為 “1” 時配合使用有效)。
P-25	吸風同步 (P16=1)	0-2000	200	布邊吸風同步時間 (P-16 設置為 “1” 時配合使用有效)。
P-26	兩感測器間針數	1-600	100	迴圈週期參數：在一個週期內後感測器接收到信號後才能連續運行，否則一個週期停止。
P-27	前剪線延遲針數	0-50	3	數值越小越提前，線頭預留越長 (中感測器觸發)。
P-28	後剪線延遲針數	0-50	8	數值越小越提前，結尾線頭越短 (後感測器觸發)。
P-29	預留	空	空	
P-30	前吸氣關閉延時	0-2000	100	數值越小，關閉越快。
P-31	後吸氣關閉延時	100-5000	200	數值越小，關閉越快。
P-32	預留	空	空	
P-33	預留	空	空	
P-34	預留	空	空	
P-35	停車延遲針數	1-99	1	布過完感測器後幾針自動停車 (後剪線關閉狀態有

				效)。
P-36	前感測器回應時間	0-990	50	數值越小反應越快，數值越大反應越慢。
P-37	前感測器靈敏度	0-900	300	為適應不同布料設定前感測器的透布強度。
P-38	中間感測器靈敏度	0-900	215	為適應不同布料設定中感測器的透布強度。
P-39	前抬壓腳保持時間	50-2000	200	(全自動/半自動模式下) 數值越大保持時間越長。
P-40	後抬壓腳啟動時間	0-2000	120	後自動抬壓腳啟動時間，數值越小反應越快。
P-41	壓腳全始出力時間	10-990	100	數值越大壓腳抬的越高(注：不能太高)。
P-42	壓腳出力週期信號(%)	10-90	25	壓腳動作時，以週期性省電輸出，避免電磁鐵發燙。
P-43	壓腳下放時間	10-990	100	壓腳下放時序的動作時間。
P-44	壓腳保護時間(秒)	1-120	5	中途停車抬壓腳、剪線後停車自動抬壓腳、反踏抬壓腳後保持時間到後強制關閉。
P-45	剪線時間	10-990	30	時間越長，剪線力度越大
P-46	連續送布吸氣	0-2	0	0：不吸氣 1：長吸氣 2：同步吸氣
P-47	計件數		0	
P-48	開機找上定位	0-1	1	0：關閉 1：開啟
P-49	預留	空	空	
P-50	上定位調整	0-2399	26	與 P-72 項設置同步
P-51	下定位調整	0-2399	16	與 P-73 項設置同步
P-52	測試速度	200-7000	2000	
P-53	測試工作時間 (×100 毫秒)	1-250	20	
P-54	測試停止時間 (×100 毫秒)	1-250	20	
P-55	測試 A：持續運行	0-1	0	0：關閉 1：開啟
P-56	測試 B：含功能運行	0-1	0	0：關閉 1：開啟
P-57	測試 C：啟停運行	0-1	0	0：關閉 1：開啟
P-58	縫台保護	0-1	1	0：關閉 1：開啟
P-59	壓腳保護	0-1	1	0：關閉 1：開啟
P-60	電動/氣動	0-1	0	0：電動 1：氣動
P-61	後踏剪線開關	0-7	1	0：全關 1：全人工開 2：半自動開

				3：全自動開 4：全人工和半自動開 5：半自動和全自動開 6：全人工和全自動開 7：全人工和半自動和全自動開
P-62	預留	空	空	
P-63	語言	0-2	1	0: 英文 1：中文 2：土耳其語
P-64	前發射管強度	0%-100%	80%	調節前發射管強度。
P-65	中發射管強度	0%-100%	80%	調節中發射管強度。
P-66	後發射管強度	0%-100%	80%	調節後發射管強度。
P-67	後感測器靈敏	0-900	375	為適應不同布料設定後感測器的透布強度。
P-68	預留	空	空	
P-69	後感應緩回應時間	0-3000	0	在縫製網格布的情況下可以調節此項，以達到想要的效果。
P-70	機型選擇	0-2	0	0：橫刀機型 1：側刀機型 2：倒回縫
P-72	手動上定位調整	0-2399	0	從手輪方向看，順時針轉動手輪轉到上定位，點擊 S 鍵保存當前數值為下定位，只可微調。
P-73	手動下定位調整	0-2399	0	從手輪方向看，順時針轉動手輪轉到下定位，點擊 S 鍵保存當前數值為下定位，只可微調。
P-74	參數查看	N1-N5		N1：電控軟體版本 N2：面板軟體版本 N3：轉速 N4：腳踏板 AD N5：驅動軟體版本
P-75	預留	空	空	
P-76	密碼設置	0000-9999	0000	代理商使用：修改後可使普通用戶進不了高級參數並修改高級參數。
P-77	零點角度設置		0000	
P-78	吸風桶類型	0-2	0	0：有刷 1：無刷 2：氣閥
P-79	預留	空	空	
P-80	針杆護罩保護	0-1	0	0：關閉 1：開啟
P-81	電磁鐵保護	0-1	1	0：關閉 1：開啟
P-82	報警件數	0-9999	0	
P-83	待機顯示件數	0-1	0	0：關閉 1：開啟

P-84	計件模式選擇	0-1	0	0：增序 1：減序
P-85	計件剪線次數	0-50	1	
P-86	語音音量	0-5	4	
P-87	語音播報選擇	0-3	3	0：關閉 1：僅開機語 2：僅按鍵音 3：開啟
P-88	用戶機型		2	
P-89	預留	空	空	
P-90	語音晶片選擇	0-4	4	
P-91	後感應開關	0-1	1	0：關閉 1：開啟
P-92	開機語選擇	0-11	0	
P-93	預留	空	空	
P-94	薄料透光度	1-800	20	
P-95	普通料透光度	1-800	200	
P-96	網格料透光度	1-800	50	
P-97	特殊料檢測針數	0-50	0	
P-98	剪線速度開關	0-3	0	0：關閉 1：前開 2：後開 3：前後開
P-99	前剪線保護	0-1	0	0：關閉 1：開啟
P-100	縫製布料類型	0-2	0	0：普通料 1：薄料 2：網格料
P-101	前感應識別信號差	0-50	10	
P-102	中感應識別信號差	0-50	10	
P-103	後感應識別信號差	0-50	10	
P-104	踏板加速斜率	1-100	32	
P-105	預留	空	空	
P-106	後踏剪線次數	0-1	0	

注：參數預設值僅供參考，實際參數值以實物為準。

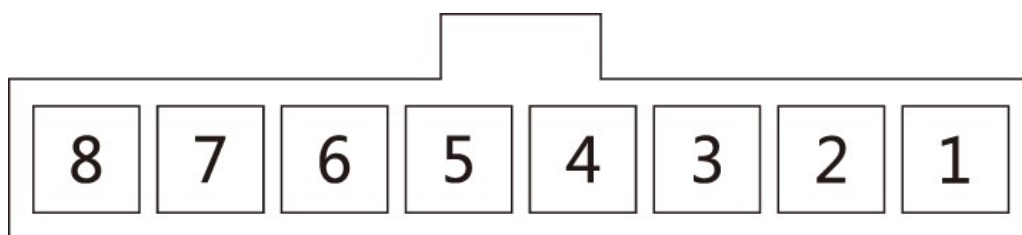
4.誤代碼表

錯誤碼	內容	對策
NC	前面操作盒與 CPU 傳輸通信異常	關閉系統電源，檢查控制台的連線是否鬆動或脫落，將其恢復正常後重啟系統。若仍不能正常工作，請更換控制箱並通知售後服務。
E01	超電壓	1、電網電壓是否高於 AC260V。 2、如果是自行發電供電，請降低發電機功率。 3、若仍不能正常工作，請更換控制箱並通知售後服務。

E02	低電壓	1、是否插入低電壓。 2、恢復出廠設置。 3、若仍不能正常工作，請更換控制箱並通知售後服務。
E05	控速器接觸異常	1、檢查控速器接頭是否鬆動或脫落，將其恢復正常後重啟系統。 2、若仍不能正常工作，請更換控制箱或控速器並通知售後服務。
E07	電機堵轉	1、關閉電源，檢查手輪是否可以順暢轉動（手轉手輪），如果無法轉動請排查機械。 2、關閉電源，檢查電機電源介面是否鬆動，插好後重啟。 3、檢查上停針位是否正確，如果不正確請調整上定位位置。 4、若仍不能正常工作，請更換控制箱或主軸電機並通知售後服務。
E11	定位信號異常	1、關閉系統電源，檢查主軸電機編碼器介面是否鬆動或脫落，將其恢復正常後重啟系統。 2、檢查電機零點校正設置是否正確；重新設置電機零點校正，編碼器碼盤是否有油，如果有請清理乾淨。 3、若仍不能正常工作，請更換控制箱或主軸電機並通知售後服務。
E14	編碼器信號異常	1、關閉系統電源，檢查主軸電機編碼器介面是否鬆動或脫落，將其恢復正常後重啟系統。 2、檢查光柵安裝是否正確（光柵螺絲有沒有固緊，光柵是不是在編碼器頭居中位置）。 3、檢查光柵碼盤是不是有油，如果有，請清理乾淨，復原後重啟系統。 4、若仍不能正常工作，請更換控制箱或主軸電機並通知售後服務。
E15	電力模組不正常過流保護	1、請檢查電機電源線有沒有接觸不良。 2、請檢查電機電源線有沒有被壓破。 3、請更換控制箱或主軸電機並通知售後服務。
E16	抬壓腳保護開關沒到正確位置	檢查壓腳是否回到正確位置，抬壓腳開關是否損壞，插座是否異常。
E17	縫台保護開關沒到正確位置	檢查縫台是否打開，縫台安全開關是否損壞，插座是否異常。

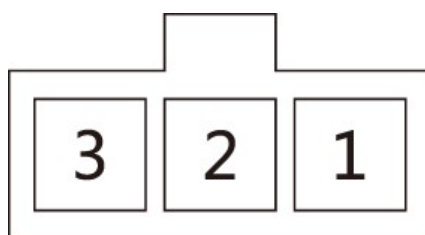
5．埠示意圖

8P 白色埠（LED、發射器）



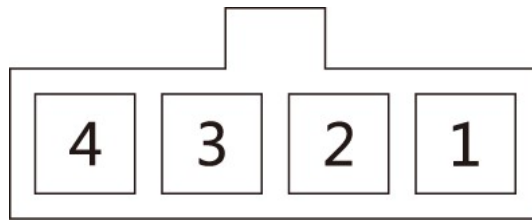
1：LED，2：後發，3：中發，4：前發，5：手動剪線，6：安全開關，7：GND，8：5V

3P 黑色埠（壓腳位置感應）



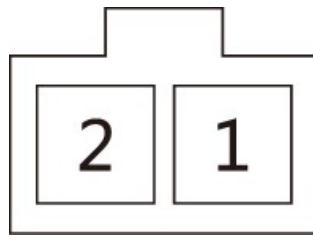
1：5V，2：GND，3：霍爾信號

4P 白色埠（縫台位置感應與後接收）



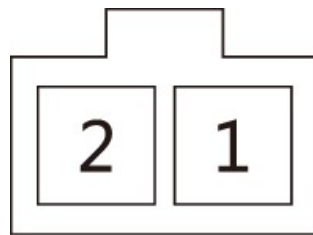
1：霍爾信號，2：GND，3：接收信號，4：5V

2P 白色埠（前接收）



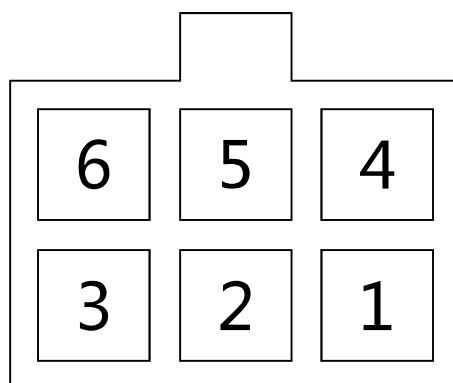
1：5V，2：GND

2P 黑色埠（中接收）



1：5V，2：GND

6P 白色埠（集成功能）

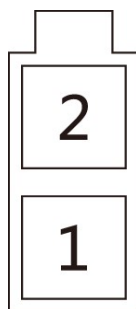


1.剪線電磁鐵：1（剪線輸出），4（32V）

2.後吸風：2（後吸輸出），5（32V）

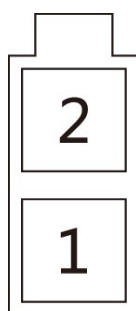
3.前吸風：3（前吸輸出），6（32V）

2P 黃色埠（壓腳電磁鐵）




1：壓腳輸出，2：32V

2P 白色埠（預留）



1：預留輸出，2：32V

Safety Instruction

1. Users are required to read the operation manual completely and carefully before installation or operation.
2. This product must be installed or operated by properly trained personnel. All power must be turned off during installation, and remember not to operate with power.
3. All the instruction marked with sign  must be observed or executed; otherwise, bodily injuries might occur.
4. For perfect operation and safety, it is prohibited that using extension cable with multi-outlet for power connection.
5. When connecting power supply cords to power sources, it is necessary to make sure that the power voltage matches the rated voltage $\pm 20\%$ indicated on the motor's name plate.
6. Do not operate in direct sun light, outdoors area and where the room temperature is over 45°C or below 0°C .
7. Please avoid operating near the heater at dew area or at the humidity below 10% or above 90%.
8. Do not operate in area with heavy dust, corrosive substance or volatile gas.
9. Avoid power cord being applied by heavy objects or excessive force, or over bend.
10. The earth wire of power cord must be connected to the system ground of the production plant by proper size of conductions and terminals. This connection should be fixed permanently.
11. All the moving portions must be prevented to be exposed by the parts provided.
12. Turing on the machine in the first time, operate the sewing machine at low speed and check the correct rotation direction.
13. Turn off the power before the following operation:
 1. Connecting or disconnecting any connectors on the control box or motor.
 2. Threading needle.
 3. Raising the machine head.
 4. Repairing or doing any mechanical adjustment.
 5. Machines idling.
14. Repairs and high level maintenance work should only be carried out by electronic technicians with appropriate training.
15. All the spare parts for repair must be provided or approved by the manufacturer.
16. Don't use any objects or force to hit or ram the product.

Guarantee Time

Warranty period of this product is 1 year dated from purchasing, or within 2 years from ex-factory date.












Warranty Detail



Any trouble found within warranty period under normal operation, it will be repaired free of charge. However, maintenance cost will be charged in the following cases even if within warranty period:

1. Inappropriate use, including: wrong connecting high voltage, wrong application, disassemble, repair, modification by incompetent personnel, or operation without the precaution, or operation out of its specification range, or inserting other objects or liquids into the product.
2. Damage by fire, earth quake, lighting, wind, flood, salt corrosive, moisture, abnormal power voltage and any other damage cause by the natural disaster or by the inappropriate environments.
3. Dropping after purchasing or damage in transportation by customer himself or by customer's shipping agency

Note: We make our best effort to test and manufacture the product for assuring the quality. However, it is possible that this product can be damaged due to external magnetic interference and electronic static or noise or unstable power source more than expected; therefore the grounding system of operate area must guarantee the good earth and it's also recommended to install a failsafe device (such as residual current breaker).

1. Key description

No.	Icon	Name	Function description
1		Function key	<p>1. In the normal mode interface, press it to enter the "User parameter setting" interface.</p> <p>2. In the normal mode interface, long press it to enter the "Advanced parameter setting" interface.</p> <p>3. In the parameter setting interface, press it to return to the main interface.</p>
2		Setting parameter check and save	In the parameter setting interface, press it to save setting.
3		Parameter increase	<p>1. In the parameter setting interface,press it to increase parameters.</p> <p>2. In the normal mode interface, press it to improve running speedor increase pedal slope.</p>
4		Parameter decrease	<p>1. In the parameter setting interface,press it to decrease parameters.</p> <p>2. In the normal mode interface, press it toreduce the brightness of LED lights;long-press it to enter the color system adjustment.</p>
5		Left key	Check the previous parameter.
6		Right key	<p>1. In the parameter setting interface, press it to check the next parameter.</p> <p>2. In the normal mode interface, long-press it to enter to the shortcut interface.</p>
7		Thread trimming	<p>1. Press it can switch thread trimming off, front trimming on, back trimming on, and front and back trimming on successively.</p> <p>2. Long press it to enter thread trimming setting interface.</p>
8		Mode selection	<p>1.If you click, the following 4 modes will be switched in a loop:</p> <p>a. Fully automatic: start-up is completed by full induction signal.</p> <p>b. Free sewing</p> <p>c. Semi-automatic: start the front induction signal + pedal to complete (synchronized with P-05 item).</p> <p>d. Full manual: start-up is completed by pedal.</p> <p>2.Long press it to enter mode setting interface.</p>
9		Auto-suction	<p>1. Press it can switch suction off, front suction on, back suction on, and front and back suction on successively.</p> <p>2. Long press it to enter suction setting interface.</p>
10		Presser foot lifting	<p>1. Press it can switch function off, front presser footlifting, back presser footlifting, and front and back presser footlifting successively.</p> <p>2. Long press it to enter presser foot lifting setting interface.</p>
11		Sensor	<p>1. Press this key to check the real-time sensing value and current threshold of the sensor.</p> <p>2. Long-press it to enter sensor sensitivity setting interface.</p> <p>In parameter mode, if long press, the parameter will be saved as user parameter mode.</p>

			3. In the parameter setting interface, long-press it to save the parameter as user parameter mode.
12		Cloth identification	Long-press in the main interface to enter the fabric recognition mode.
13		Reset	In the normal mode interface, long-press this key for 3 seconds to restore the factory settings.
14	Indicator light	①F-SENSOR ②M-SENSOR ③B-SENSOR ④STATE	1. When the front sensor senses that there is cloth, the yellow-green light of F-SENSOR is on, and it goes out when there is no cloth. 2. When the middle sensor senses that there is cloth, the yellow-green light of M-SENSOR is on, and it goes out when there is no cloth. 3. When the back sensor senses that there is cloth, the yellow-green light of B-SENSOR is on, and it goes out when there is no cloth. 4. When the sewing machine is abnormal, the red light of STATE is on, and it is off when it is normal.

2. Special function operation definition

No.	Function name	Function description
1	Advanced parameter mode	In the main interface, long press the "P" to enter the "Advanced parameter setting" interface (P26).
2	Technician parameter mode	In the main interface, press "P" + "S" at the same time, enter the setting password (the default password is 0000), and enter the "technician parameter mode" interface.
3	Cloth identification mode	Step 1: Press and hold the cloth recognition button in the main interface to enter the cloth recognition mode interface; Step 2: After removing the cloth from the sensor, press "S"; Step 3: After selecting the fabric recognition mode, press "S"; the setting is complete. (There are prompts on the interface)
4	Piece counting function	In the main interface, press "X" and "L" at the same time to enter the piece counting interface (P47).
5	Quick operation interface	In the main interface, long press "→" to enter the shortcut interface: 1. Main shaft zero angle setting; 2. Upper positioning adjustment; 3. Power on to find upper positioning; 4. Sewing table protection; 5. Presser foot protection.

3. System parameter setting definition

No	Function parameters	Range	Default	Description
P-01	Sewing speed(r/min)	200-7000	5500	
P-02	Needle stop positioning selection	0-1	0	0: Up needle position 1: Down needle position

P-03	Start sewing speed(r/min)	200-7000	5200	With trimming function: the speed setting for front sensor trigger start-up and back sensor signal finish (before trimming)
P-04	Start-up mode	0-1	0	(Valid for full-automatic mode) 0: Automatic mode 1: Foot control mode(start-up by front sensor + front pedal)
P-05	Automatic/semi-automatic mode selection	0-1	0	(P-06 is turn on) 0: Semi-automatic (foot control mode) 1: Automatic (match with P-04 use)
P-06	Auto sensing switch	0-1	1	0: OFF (full manual mode is turn on) 1: ON (it can execute automatic/ semi-automatic mode also match with P-05 use)
P-07	Auto trimming switch	0-3	3	0: OFF 1: Front trimming (trimming when mid-sensor receive signal) 2: Back trimming (trimming after back-sensor receive signal) 3: Front and back trimming
P-08	Auto suction	0-3	3	0: OFF 1: Front trimming suction 2: Back trimming suction 3: Front and back trimming suction
P-09	Automatic cloth feeding	0-2	0	0: OFF 1: Cloth feeding when sewing 2: Cloth feeding after sewing
P-10	Auto presser foot lifting	0-3	0	0: OFF 1: Front presser foot lifting (when front sensor receive signal) 2: Back presser foot lifting (after back sensor receive signal) 3: Front and back presser foot lifting
P-11	Presser foot lifting when sewing	0-1	0	(Valid for full-manual and semi-automatic mode) 0: OFF 1: ON (presser foot lifting automatically after stop)
P-12	Presser foot lifting after trimming	0-1	0	0: OFF 1: ON
P-13	Presser foot lifting when half back pedal	0-2	0	(Valid for full-manual / semi-automatic mode) 0: Half back & full back 1: OFF 2: Full back
P-14	Manual suction	0-2	1	0: No suction 1: Back suction 2: Front and back suction
P-16	Low air pressure mode	0-1	0	0: OFF 1: ON
P-17	Continuous sewing switch	0-1	0	0: OFF 1: ON
P-18	Constant speed thread	0-1	0	0: OFF (it will not execute P-03 speed before backtrimming)

	trimming switch			1: ON (the speed of front and back trimming is fixed to the speed of P-03)
P-19	Reserved	null	null	
P-20	Needle stop position selection after trimming	0-1	1	0: Down position 1: Up position
P-21	Reserved	null	null	
P-22	Front Receiver E# switch	0-1	1	0: OFF (turn off front sensor, pedal directly activated) 1: ON (turn on front sensor, sensor signal + pedal activated)
P-23	Intermittent suction opening time(×100ms)	1-600	20	The more value the more time.
P-24	Intermittent suction off time (×100ms)	0-600	0	0: For no intermittent air suction Front suction off time (valid when P-46 function setting is 1).
P-25	Synchronous suction (P16=1)	0-2000	200	Synchronous suction time of cloth (valid for P-16 setting is 1).
P-26	The stitches number between two sensors	1-600	100	Cycle period parameter: in a circle the back sensor receive signal then can continue running, otherwise a cycle stop.
P-27	The delayed stitches number of front trimming	0-50	3	The smaller value the more in advance, thread will retain longer (mid-sensor trigger).
P-28	The delayed stitches number of back trimming	0-50	8	The small value the more in advance, the short of end-thread (back-sensor trigger).
P-29	Reserved	null	null	
P-30	The delayed time of front suction off	0-2000	100	The smaller the value, the faster the shutdown.
P-31	The delayed time after trimming suction	100-5000	200	The smaller the value, the faster the shutdown.
P-32	Reserved	null	null	
P-33	Reserved	null	null	
P-34	Reserved	null	null	
P-35	The delayed stitches number before the machine stops	1-99	1	After through cloth back-sensor, the number of stitches when machine stop automatically (valid for back-sensor OFF condition).
P-36	The response time of front sensor	0-990	50	The small value the response is fast, the large value the response is slow.
P-37	The sensitivity of front sensor	10-900	300	In order to adapt different cloth material setting front sensor receive strength.
P-38	The sensitivity of middle sensor	10-900	215	In order to adapt different cloth material setting mid-sensor receive strength.
P-39	The holding time of front presser foot lifting (ms)	50-2000	200	(In full automatic / semi-automatic mode) The larger value the longer holding time.
P-40	Back presser foot lifting start time (ms)	0-2000	120	The starting time of back presser foot lifting, the smaller value the faster the response.
P-41	Full-on output time setting of presser foot (ms)	10-990	100	The larger value the higher of foot lifting (noted: not too high).

P-42	Periodic signal of presser foot output (%)	10-90	25	When the presser foot is moving, the output is periodically power-saved to prevent the electromagnet from getting hot.
P-43	The time for the presser foot laying down	10-990	100	The action time of presser foot laying down sequence.
P-44	Presser foot protection (s)	1-120	5	Stop on the sewing the presser foot lifting, stop after trimming presser foot lifting, positive closing after heeling pedal for retention time.
P-45	Trimming time (ms)	10-990	30	The longer time, the greater trimming force.
P-46	Suction when continuous feeding	0-2	0	0: No suction 1: Long suction 2: Synchronous suction
P-47	Total pieces		0	
P-48	Needle goes up as power on	0-1	1	0: OFF 1: ON
P-49	Reserved	null	null	
P-50	Up needle position adjustment	0-2399	26	Same as P-72.
P-51	Down position adjustment	0-2399	16	Same as P-73.
P-52	Test speed	200-7000	2000	
P-53	Test working time(×100ms)	1-250	20	
P-54	Test stop time(×100ms)	1-250	20	
P-55	Item A testing: continuous running	0-1	0	0: OFF 1: ON
P-56	Item B testing: with function running	0-1	0	0: OFF 1: ON
P-57	Item C testing: start stop operation	0-1	0	0: OFF 1: ON
P-58	Machine plate protection switch	0-1	1	0: OFF 1: ON
P-59	Presser foot protection switch	0-1	1	0: OFF 1: ON
P-60	Electric /Air-powered	0-1	0	0: Electric 1: Air-powered
P-61	Trimming switch by heeling pedal	0-7	1	0: OFF 1: In manual mode 2: In semi-automation 3: In automation 4: In manual mode and semi-automation 5: In semi-automation and automation 6: In manual mode and automation 7: ON
P-62	Reserved	null	null	
P-63	Language	0-2	1	0: English

				1: Chinese 2: Turkish
P-64	The strength of front sensor	0%-100%	80%	Adjustment front sensor strength
P-65	The strength of middle sensor	0%-100%	80%	Adjustment middle sensor strength
P-66	The strength of back sensor	0%-100%	80%	Adjustment back sensor strength
P-67	The sensitivity of back sensor	10-900	375	In order to adapt different cloth material setting back-sensor receive strength.
P-68	Reserved	null	null	
P-69	Response time of back sensor(ms)	0-3000	0	Response time of back-sensor, when sewing such as mesh cloth can adjust this item, then can achieve you want effects.
P-70	Model selection	0-2	0	0: Horizontal knife type 1: Side knife type 2: Back-tacking type
P-72	Manually up positioning adjustment	0-2399	0	Through hand-wheel direction, clockwise turn hand-wheel to up position press "S" to save the current value.
P-73	Manually down positioning adjustment	0-2399	0	Through hand-wheel direction, clockwise turn hand-wheel to down position then press "S" to save current value.
P-74	Parameter reference	N1-N5		N1: Control box software version N2: Panel software version N3: Rotation N4: Pedal AD N5: Driver software version
P-75	Reserved	null	null	
P-76	Password setting	0000-9999	0000	Agent use: After modification, ordinary users can't enter advanced parameters and modify advanced parameters.
P-77	Zero point angle setting		0000	
P-78	Suction bucket type	0-2	0	0: With brush 1: Without brush 2: Valve
P-79	Reserved	null	null	
P-80	The needle bar shield protection switch	0-1	0	0: OFF 1: ON
P-81	Electromagnet protection	0-1	1	0: OFF 1: ON
P-82	Alarm pieces	0-9999	0	
P-83	The number of standby display pieces	0-1	0	0: OFF 1: ON
P-84	Piece counting mode selection	0-1	0	0: Ascending 1: Descending
P-85	Piece counting trimming times	0-50	1	

P-86	Voice volume	0-5	4	
P-87	Voice broadcast selection	0-3	3	0: OFF 1: Start-up voice only 2: Key tone only 3: ON
P-88	User model		2	
P-89	Reserved	null	null	
P-90	Voice chip selection	0-4	4	
P-91	Back sensor switch	0-1	1	0: OFF 1: ON
P-92	Start machine voice selection	0-11	0	
P-93	Reserved	null	null	
P-94	Thin material light transmission	1-800	20	
P-95	Ordinary material light transmission	1-800	200	
P-96	Grid material light transmission	1-800	50	
P-97	Number of special material detection needles	0-50	0	
P-98	Trimming speed switch	0-3	0	0: OFF 1: Front trimming 2: Back trimming 3: ON
P-99	Front trimming protection	0-1	0	0: OFF 1: ON
P-100	Sewing fabric type	0-2	0	0: Thin material 1: Ordinary material 2: Grid material
P-101	Front sensor identification signal difference	0-50	10	
P-102	Middle sensor identification signal difference	0-50	10	
P-103	Back sensor identification signal difference	0-50	10	
P-104	Pedal acceleration slope	1-100	32	
P-105	Reserved	null	null	
P-106	Back pedal trimming times	0-1	0	

Note: the initial value of parameters is for reference only, and the actual value of parameters is subject to the real object.

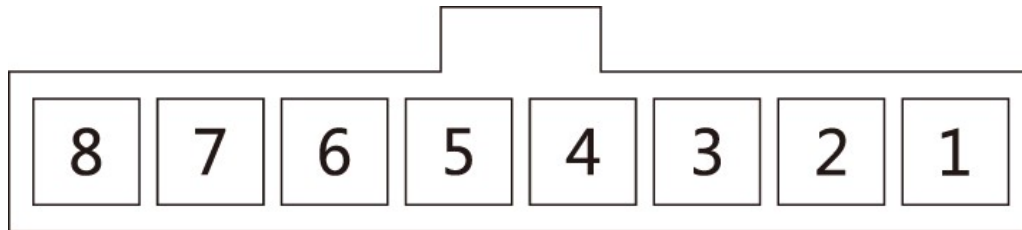
4. Error code list

Error Code	Problem	Solution
NC	Abnormal communication	Turn off the system power and check whether the panel connector is loose or disconnected. After troubleshooting, if the fault persists, check whether the power supply indicator of the main control chip is on. If abnormal, please replace the control box.
E01	High voltage	<ol style="list-style-type: none"> Whether the grid voltage is higher than AC260V. If it is self-generated power supply, please reduce the generator power. If it still does not work normally, please replace the control box and notify the after-sales service.
E02	Low voltage	<ol style="list-style-type: none"> Whether to connect to low voltage. Reset. If it still does not work normally, please replace the control box and notify the after-sales service.
E05	Speed controller contact abnormal	<ol style="list-style-type: none"> Check whether the pedal connector is loose or fall off, and restart the system after returning it to normal. If it still does not work normally, please replace the control box or speed controller and notify the after-sales service.
E07	Motor stalling	<ol style="list-style-type: none"> Turn off the power and check whether the handwheel can be turned smoothly (turn the handwheel by hand), if it cannot be turned, please check the machine. Turn off the power, check whether the motor power connector is loose, plug it in and restart it. Check whether the upper needle stop position is correct, if not, please adjust the upper positioning position. If it still does not work normally, please replace the control box or spindle motor and notify the after-sales service.
E11	Abnormal positioning signal	<ol style="list-style-type: none"> Turn off the system power, check whether main shaft motor encoder connector is loose or fall off, restore it to normal and restart the system. Check whether the motor zero point correction setting is correct; Reset the motor zero point correction; Whether there is oil on the encoder code plate, please clean it if there is any. If it still does not work normally, please replace the control box or main shaft motor and notify the after-sales service.
E14	The encoder signal is abnormal	<ol style="list-style-type: none"> Turn off the system power, check whether the main shaft motor encoder connector is loose or fall off, restore it to normal and restart the system. Check whether the grating is installed correctly (whether the grating screws are tightened and whether the grating is in the center of the encoder). Check whether there is oil on the encoder code plate, if there is, please clean it up, and restart the system after recovery. If it still does not work normally, please replace the control box or main shaft motor and notify the after-sales service.
E15	Power module abnormal overcurrent protection	<ol style="list-style-type: none"> Please check whether the motor power cord has bad contact. Please check whether the motor power cord is crushed.

		3. Please replace the control box or main shaft motor and notify the after-sales service.
E16	Incorrect position of presser foot	Check whether the presser foot is open, whether the presser foot safety switch is damaged, and whether the socket is abnormal.
E17	Incorrect position of sewing table	Check whether the sewing table is open, whether the safety switch of the sewing table is damaged, and whether the socket is abnormal.

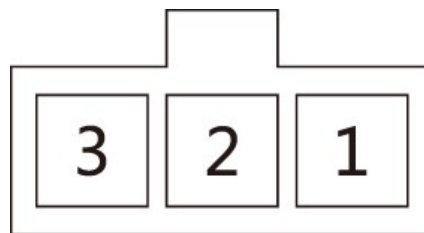
5. Port diagram

8P white port (LED, launcher)



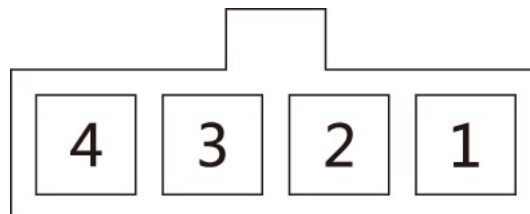
1: LED, 2: Back launcher, 3: Middle launcher, 4: Front Launcher, 5: Manual trimming, 6: Safety switch, 7: GND, 8: 5V

3P black port (presser foot position sensing)



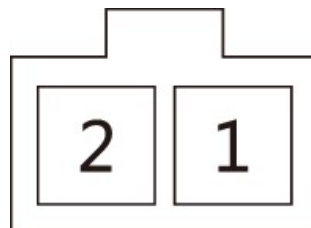
1: 5V, 2: GND, 3: Hall signal

4P white port (sewing table position sensing and back receiving)



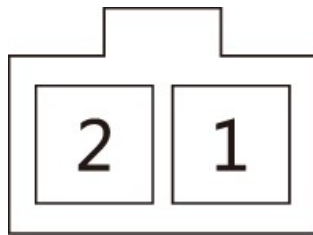
1: Hall signal, 2: GND, 3: Received signal, 4: 5V

2P white port (front receiving)



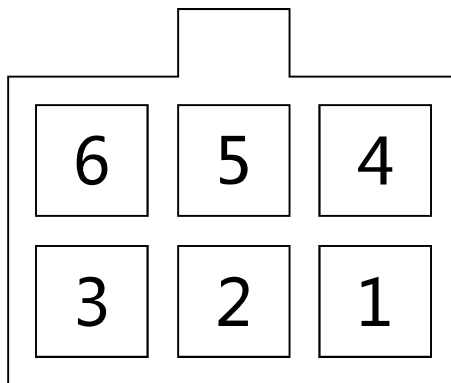
1: 5V, 2: GND

2P black port (medium receiving)



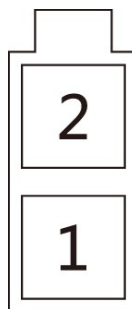
1: 5V, 2: GND

6P white port (integrated function)



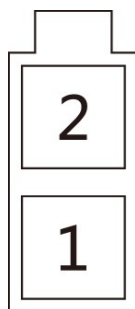
1. Thread trimmingelectromagnet: 1 (trimming output), 4 (32V)
2. Back suction: 2 (back suction output), 5 (32V)
3. Front suction: 3 (front suction output), 6 (32V)

2P yellow port (presser foot lifting electromagnet)



1:Presser foot output, 2: 32V

2P white port (reserved)



1:Reserved output,2: 32V



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The specification and/or the equipment described in the instruction book and parts list
are subject to change because of modification with out previous notice
KZ08KQ-1.DEC.2022