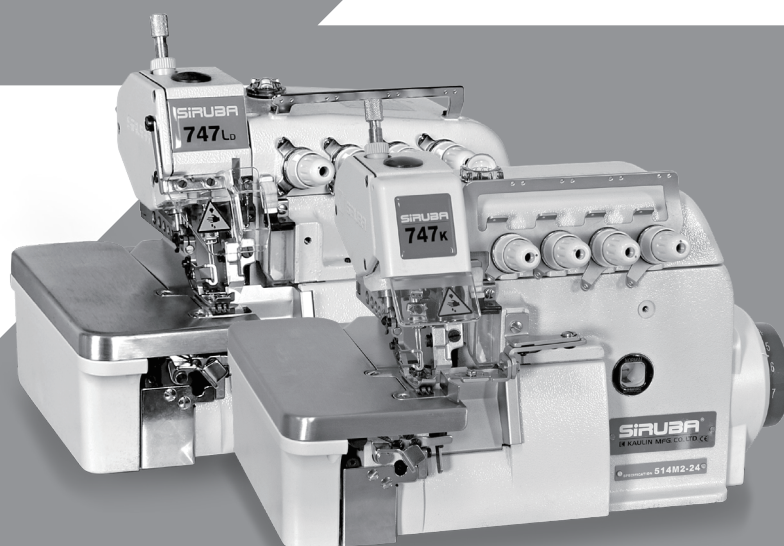


# SIRUBA

電控參數說明書

ELECTRONIC CONTROL PARAMETER MANUAL

■ 700K/700L DKKU ECA/ECB/VTE/CTE



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## 一般安全事項說明

## GENERAL SAFETY INSTRUCTIONS

### 警告！

當使用這台機器，基本安全預防應恆被遵守，以減輕火災、電擊、或是個人傷害的風險。包含以下注意事項。  
在操作這台機器之前，請閱讀所有說明並且緊記於心。

#### 1. 保持工作場所清潔

雜亂的環境與椅子會招引危害。

#### 2. 考量工作場所環境

勿暴露電源於雨水之中、勿在溼氣重的地方或潮濕的場所使用機械器具。保持工作場所良好整齊。當有引發火災或爆炸危險時，勿使用電源工具。

#### 3. 免於電擊危害

避免身體接觸地線或是接地表面。(即：管線，發熱物體，以及冷凍庫)

#### 4. 勿使孩童接近

不要讓訪客接觸工具或是延伸管線。

#### 5. 適當的穿著

不要穿著寬鬆衣物或是穿戴珠寶，這可能被活動零件拉扯而導致危險。穿戴護髮套可包住長髮。

#### 6. 不要任意拉扯電線

絕不要用電源端拉扯機器，或是從插座猛拉電線來拔掉電線。使電線遠離熱源、油類或是尖銳邊緣。

#### 7. 謹慎保養機器

遵從指示來添加潤滑油或是更換附件。定期檢測工具用線，如果有所損害，請使用合格的維修器具來修復。

### Warning!

When using this machine, basic safety Precautions should always be followed to reduce the risk of fire, electric shock and personal injury, including the followings. Read all these instructions before operating this product and save these instructions.

#### 1. Keep work area clean

Cluttered areas and benches invite injuries.

#### 2. Consider work area environment

Do not expose power to rain. Do not use machine tools in damp or wet locations. Keep work area well lit.

Do not use power tools where there is risk to cause any fire or explosion.

#### 3. Guard against electric shock

Avoid body contact with earthed or grounded surfaces (e.g. Pipes, radiators, ranges refrigerators.)

#### 4. Keep children away

Do not let visitors touch the tool or extension code.

#### 5. Dress properly

Do not wear loose clothing or jewelry, they can be caught in moving parts. Wear protecting hair covering to contain long hair.

#### 6. Do not abuse the cord

Never carry the machine by cord or yank it to disconnect it from the socket. Keep the cord away from heat, oil, and sharp edges..

#### 7. Maintain machine with care

Follow instructions for lubrication and changing accessories. Inspect tool cord periodically. If damaged, have it repaired by an authorized service facility.

## 8. 中斷機器電源

當不使用機器時、維修前、以及更換配件時。

## 9. 避免誤啟動

不要以手指置於啟動開關上之後，搬運一個已插入電源的工具。確定在插電之前，電源開關是關閉的。

## 10. 檢查損害零件

在進一步使用器具之前，應該小心檢查並確認損傷的零件或是穿戴保護器具來確認零件會正確運轉並且呈現應有功能。

## 11. 警告

除了在這本使用說明手冊中建議的功能之外，任何附件或是配件的使用，都可能會導致個人傷害的危險。

## 12. 由合格人員來修理工具

所以修理工作應由合格的人員使用原始個別零件來作修理。

### 連接電源的特別警示！

1. 只可與有 "CE" 認證的按壓啟動裝置連接這台機器。
2. 遵守此使用說明手冊來安裝控制裝置。
3. 在操作過程中，永遠保持機器適當的接地。
4. 在調整、更換零件、或是維修保養之前，必須確定將插頭由插座拔出，以預防任何機器意料之外的啟動而造成危害。

## 8. Disconnect machine

When not in use, before servicing and when changing accessories.

## 9. Avoid unintentional starting

Do not carry a plug-in tool with a finger on the switch. Ensure the power switch is off when plugging in.

## 10. Check damaged parts

Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function.

## 11. Warning

The use of any accessory or attachment, other than those recommended in this instruction manual, may present a risk of personal injury.

## 12. Have your tool repaired by a qualified person








Repairs should only be carried out by qualified persons using original spare parts.

### SPECIAL WARNING FOR ELECTRIC CONNECTION!

1. Incorporate this machine only with "CE" certificate hold-to-run control device.
2. Follow the instruction manual device to install control device.
3. Always earth machine appropriately during operation.
4. Before adjustment, parts change or servicing must be sure to pull out the plug from socket to prevent the hazard of unintentionally start of machine.





## 重要安全事項說明

恭喜您購買本機器，為了使這台機器能獲得最佳功能以及安全的操作，務必請正確的使用這台機器，使用前請仔細閱讀使用說明書，希望您能長期使用它。請記得將此說明書放在容易取得的地方。

-  1. 當您使用機器時，除了以下事項外，請注意其他基本安全措施。
-  2. 使用機器前，除了本使用說明書外，請詳細閱讀其他相關說明書。此外，請妥善保存此說明書，以便需要時可以隨時取閱。
-  3. 先確認機器是符合貴國安全規定及標準後，再使用機器。
-  4. 當機器完成操作時，所有安全配備必須安裝就緒，在缺少所述安全配備下操作是不被允許的，以免導致人員受傷。
-  5. 此機器應由受過適當訓練之操作員操作。
-  6. 為了安全，我們建議您配戴安全眼鏡。
-  7. 以下情形，請先關閉電源或拔掉插頭：
  - (1) 穿針線、導線片、天平等以及更換梭子時。
  - (2) 更換針、壓具、針板、送具、頂針片、車布導板，以及其他附屬配件時。
  - (3) 維修工作時。
  - (4) 離開工作場所或工作場所無人看顧時。

## IMPORTANT SAFETY INSTRUCTION

For operating safely and getting the best functions of this machine, you must operate it correctly. Please read and follow the instructions of this manual, and keep it at hand for future references. We are confident that you will enjoy this machine as much as we enjoy manufacturing it.

-  1. Instead of the following instructions, when you use this machine, please pay attention to the basic safety measures.
-  2. Before using this machine, please read this manual and all related instructions. In addition, please keep this manual for future needs.
-  3. Before using this machine, please ascertain that it conforms with safety standards and regulations of your country.
-  4. When the machine is ready for operation, all the safety equipments must be ready. Operate this machine without the specified safety devices is not allowed.
-  5. This machine must be operated by a properly trained operator.
-  6. For your own safety, we suggest you wearing goggles.
-  7. Please turn off the power switch or disconnect it for any one of the circumstances of the followings:
  - (1) When threading needle(s), adjusting thread Take-up(s), thread guide(s), and/or replacing bobbin(s).
  - (2) When replacing needles, presser feet, needle plates, feed dogs, needle guards, cloth guides and other parts or accessories.
  - (3) When repairing.
  - (4) When the operator leaves the working place or leaves the machine unattended.



8. 假如不慎讓機器及配件使用之油或油脂，接觸到眼睛、皮膚或誤食時，請立刻以水清洗接觸部位及就診。



9. 請勿擅自碰觸運轉中之零件或配件及注意機器電源是否已開啟，以免導致人員受傷。



10. 維修、修改及調整等工作，須由受過適當訓練的技師或熟手為之。維修時只許使用指定之零件。



11. 一般維修及檢查工作必須由受過適當訓練的人員為之。



12. 電子零件維修及保養工作必須由資深的電子技師為之，或由非常熟練的人員檢查及指導，當發現零件損壞時，請立刻停止機器運轉。



13. 在做裝有氣動式零件（例如氣缸）機器的維修及保養工作前，機器連接空壓機及高壓空氣必須予以關閉及卸除，機器中殘存高壓氣體必須予以消除，此外調整及性能檢查只能由受過適當訓練的技師或熟手為之。



14. 機器使用一段時間，必須定期清理。



8. If grease, oil, or any fluid contacts your skin or eyes by any chance, please wash the contacted area completely with clean water and consult a doctor. Or, swallow any fluid mistakenly, consult a doctor immediately.



9. Do not touch any functioning parts and devices. Always attend to whether power switch is on or off before operating in order to prevent anyone from getting hurts.



10. Qualified technicians are required for adjustment, modification, and repair. Only use assigned parts for replacement.



11. Routine maintenance and service must be performed by well trained persons, or qualified technicians.




12. Maintain and check the electronic parts must be done by qualified electrician or well-trained persons. If any electronic part damaged or malfunctioned, stop the machine immediately.





13. The air house has to be detached from the machine and the compressor or air supply has to be cut off before repairing and servicing the machine equipped with pneumatic parts such as an air cylinder. Qualified technicians or well-trained persons are required for adjustment and repairs.





14. To ensure the best performance, periodically clean the machine is necessary.

 15. 為使機器能正常操作以及減少噪音，機台務必平放地上，機器避免在強烈噪音的環境下操作。


 16. 選用適當的電源插頭，並由電子技師將其安裝在機器上，且插頭必須插在接地線之插座上。

 17. 機器只允許被使用於指定用途上，其他用途是不允許的。


 18. 修改或變更機器必須依照安全規定及標準，同時採取有效的安全措施或變更機器所引起損壞之責。


 19. 警告提示以兩種符號標示：


(1) 對操作員或服務人員之傷害危險，也為了避免觸電之危險，請勿打開馬達電器箱之外蓋，也不要觸摸電器箱裡面之零件。


 (2) 必須特別注意事項


- a. 絕對不可在移動外蓋，手指保護蓋或安全配件後，進行機器操作，以免導致人員受傷。
- b. 為了避免被機器纏住，當機器運轉中，您的手、頭髮及衣服，需遠離手輪；此外這些部位周圍不可放置任何物品，以免導致人員受傷。

 15. In order to operate properly and to reduce the noise, please place the machine flat and level on the ground. Avoid operating the sewing machine at a noisy surrounding.


 16. Select a proper power plug and install it by an electrician. Please connect the power plug to a grounded receptacle.

 17. This machine can only be used for the designed purpose. Other uses of this machine are not allowed.

 18. Any modification or conversion made on this machine must be conformed with the safety standards and regulations. Precaution is necessary. No responsibility will our company take for damages caused by any modification or conversion of this machine without permission.

 19. Two safety warning signs are applied as warning signs:

(1) For the safety of operators and service persons, please don't open the cover of any electronic control boxes of motor or other devices and don't touch any components inside to avoid electrical shock hazards.

 (2) Always keep in mind:

- a. Please never operate this machine without outer cover, finger guard or any safety device to avoid physical injury.
- b. Please keep your hair, fingers and clothes away from the hand wheel while the machine is in operation, as well as never put anything near these parts, to prevent the risk of injuries by tangled into them.





c. 當您打開電源開關後或機器已 在運轉中，絕不可將您的手放在針的下方或針線控線桿外蓋中，以免導致人員受傷。



d. 當機器運轉中，梭頭高速轉動，為了避免對手可能引起之 傷害，必須確定您的手保持遠離梭頭附近。此外，當更換梭子時，確定電源開關已關閉，以免導致人員受傷。



e. 當放置或抬起機器時，小心勿將手置於機器中，以免導致人員受傷。



f. 為了避免機器突然啟動而引起可能意外，當機頭傾斜時，請關掉機器電源，以免導致人員受傷。



g. 如果您的機器是配置伺服馬達，機器於靜止狀態時，馬達是不會產生噪音的，為了避免機器突然啟動而引起可能意外，故請關掉機器電源。



h. 為了避免觸電之危險，請絕不要在移開電源接地線後操作機器。



i. 為了避免觸電或電子零件損壞而引起之可能意外，請先切斷電源，再插上或拔掉插頭。



c. Please never put your fingers under the needle(s) or in the thread take-up cover to prevent physical injuries when you turn on the power switch or operate the machine.



d. While the machine is in operation, the hook rotates at a high speed. Please keep your hands away from the area of hook to prevent any potential injury to your hands. In addition, please make sure to turn off the power of the machine while changing bobbins.



e. Be careful and do not place your fingers inside the machine when placing or lifting the machine head to avoid possible physical injuries.



f. Please turn off the power before tilting the machine head to avoid possible accidents due to abrupt start of this machine.



g. For machine equipped servo motors, the motors do not produce noise while the machines are at rest. Therefore, please turn off the power of this accidents due to abrupt start of the machine.



h. Never operate the sewing machine after the ground wire is removed to avoid electrical shock hazards.



i. Please turn the power switch off before connecting or disconnecting the power plug to prevent possible accidents due to electric shock or damaged electronic components.



## 特別事項

## WARNING

為了避免機器故障及損壞，請先確定以下事項：



1. 當您安裝好機器後，做第一次機器操作前，請徹底清潔機器。



2. 清除運送途中累積之灰塵及溢出之油脂。



3. 確定電壓及馬達相數（單相或三相）安裝正確。



4. 確定電源插頭正確地接上電源。



5. 當使用電壓與標示電壓不同時，請勿使用機器。



6. 確定機器轉動方向是否正確。



警告：

在操作或調整本書中所提到之各步驟前，請先將電源關掉，以免因為機器突然啟動造成之意外。

Please confirm the followings to avoid malfunction or damage to this machine.



1. After installing the machine, and before the first operation, please clean it completely.



2. Clean all dust and overflowed oil during transportation.



3. Confirm that the voltage and the phase (single or 3 phase) of motor are set correctly.



4. Confirm that the power plug is correctly connected to the power supply.



5. Never use the machine when the local voltage type is different from the marked voltage on the nametag attached on the machine.



6. Confirm that the rotating direction of the machine pulley is correct.

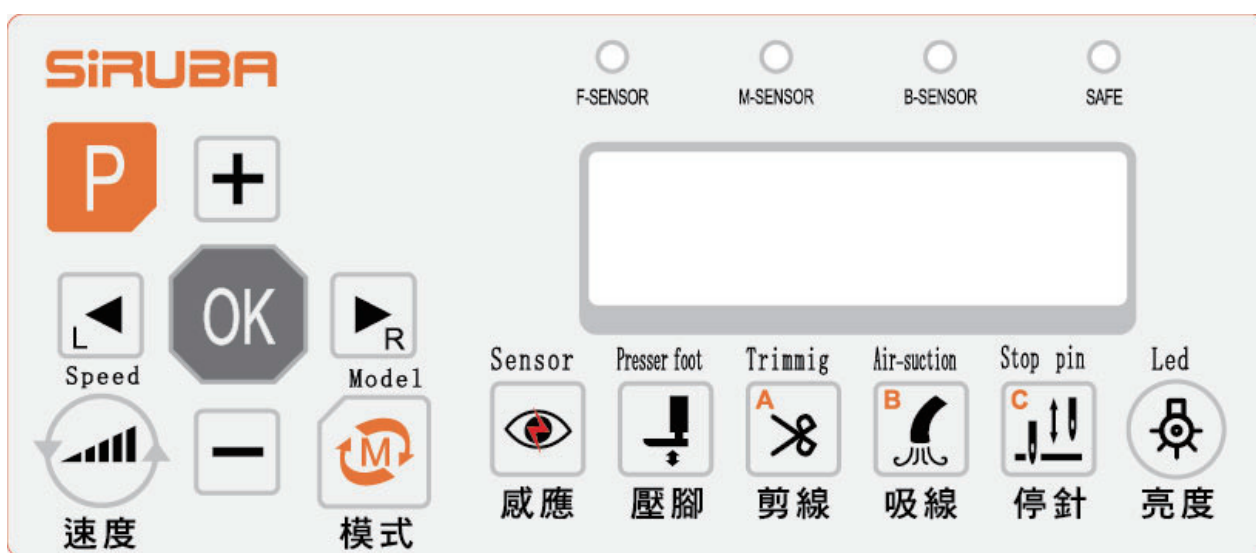


Warning:





























Before doing any operation or any adjustment described later in this manual, please turn the power off to prevent accidents caused by abrupt start of the sewing machine.






















## 顯示幕常用操作介紹

## OPERATION INTRODUCTION OF DISPLAY PANEL



序號 NO	按鍵圖示 Button Icons	功 能 說 明 Function Description
1	 ( 模式切換鍵 ) (Mode switch)	按  鍵：全自動→半自動→自由縫→全手動，之間切換 Press  :Auto → Semiauto → Free stitch → Full manual,switch in turn

2	 ( 光眼功能鍵 ) ( Sensor button )	<p>按  鍵時進入光眼調整，重複按切換：光眼開啟與關閉</p> <p>Press  to turn on or off the sensor.</p> <p>(Press  to confirm)</p>	<p>長按  鍵，再按  鍵，進行光眼自動調整，，， 分別為縫製厚料，中厚料，薄料的調整。</p> <p>Long press  to adjust sensor;and then press  for thick material  for medium thick material ;  for thin material.</p>
3	 ( 壓腳功能鍵 ) ( Presser foot switch )	<p>按  鍵時進入壓腳調整，重複按切換：前抬，後抬，前後抬，關閉，</p> <p>Press  to switch presser foot sensor in turn:front lift, rear lift, fort rear lift and off lift</p>	<p>長按  鍵進入壓腳參數調整（需密碼）</p> <p>Long press  to adjust presser foot parameters (password required)</p>
4	 ( 剪刀功能鍵 ) (trimmer switch)	<p>按  鍵時進入壓腳調整，重複按切換：前剪，後剪，前後剪，關閉，</p> <p>Press  to switch cutter sensor in turn: front cutting,rear cutting, fro+rear cutting and off cutting.</p>	<p>長按  鍵進入剪線參數調整</p> <p>Long press  to adjust trimmer parameters</p>
5	 ( 吸風功能鍵 ) (air suction switch)	<p>按  鍵時進入壓腳調整，重複按切換：前吸，後吸，前後吸，關閉，</p> <p>Press  to switch suction device in turn: front suction,rear suction, fro+rear suction and off suction</p>	<p>長按  鍵進入吸風參數調整</p> <p>Long press  to adjust parameters of suction device</p>



6	 ( 停針位調整鍵 ) (stop pin position adjustment button)	按  鍵切換上下停針位 Press  to switch up or down stop pin position	長按  鍵進入針位參數調整 Long press  to adjust pin position parameter
7	 ( 速度調整鍵 ) (Speed adjustment button )	按  鍵進入轉速調整，再通過  ，  鍵調整需要的轉速，轉速自動保存。 Press  to enter speed parameter and Press  、  to change the speed value (value automatically saved)	長按  鍵進入轉速鎖定（需要密碼） Long press  to lock speed parameter (password required)
8	 ( 機頭燈調整鍵 ) (Machine LED button)	機頭 LED 燈開關鍵 Turn on or off machine LED	
9	 ( 菜單鍵 ) ( Menu button)	按進入用戶參數 Press to enter user parameters	長按進入系統參數（需要密碼） Long press to enter system parameters (password required)
10	 ( 確認鍵 ) ( confirm button)	參數確定鍵 Parameter confirm button	
11	 ( 數值調整鍵 ) (Numerical adjustment key)	向上鍵（修改資料時加） Up key (when increasing value)	
12	 ( 數值調整鍵 ) (Numerical adjustment key)	向下鍵（修改資料時減） Down key (when reducing value)	
13	 ( 篩選鍵 ) ( Filter key)	向左鍵（在進入參數項時向左邊調整目標參數） Left key (when adjusting items)	
14	 ( 篩選鍵 ) ( Filter key)	向右鍵（在進入參數項時向右邊調整目標參數） Right key (when adjusting items)	

15	狀態指示燈 Status indicator	黃色：前光眼信號指示。 Yellow:front sensor signal indication	《有布遮住時或光眼靈敏度低於 50 時亮起》 When cloth covers front sensor or sensor sensitivity is less than 50,F-SENSOR turns yellow
		紫色：中光眼信號指示。 Purple:medium sensor signal indication	《有布遮住時或光眼靈敏度低於 50 時亮起》 When cloth covers medium sensor or sensor sensitivity is less than 50,M-SENSOR turns purple
		綠色：後光眼信號指示。 Green:back sensor signal indication	《有布遮住時或光眼靈敏度低於 50 時亮起》 When cloth covers back sensor or sensor sensitivity is less than 50,B-SENSOR turns green
		紅色：安全開關指示。 Red:safety switch indicator	《斷開時閃爍。正常合閉時滅》 SAFE indicator flashes red when disconnected and light off under normal usage
		藍色：顯示幕電源指示。 Blue:display power indicator	《顯示幕通電亮起》 Top indicator turns blue when display panel turns on
16	F-SENSOR	前光眼指示燈 Front sensor indicator	當前光眼無布料擋住時， F-SENSOR 燈亮時，則檢查光眼靈敏度，保證靈敏度不能低於 55。 When no cloth covers front sensor but F-SENSOR is on,check sensor sensitivity and ensure sensitivity is more than 55.
17	M-SENSOR	中光眼指示燈 Medium sensor indicator	當中光眼無布料擋住時， M-SENSOR 燈亮時，則檢查光眼靈敏度，保證靈敏度不能低於 55。 When no cloth covers medium sensor but M-SENSOR is on,check sensor sensitivity and ensure sensitivity is more than 55.
18	B-SENSOR	後光眼指示燈 Back sensor indicator	當後光眼無布料擋住時， B-SENSOR 燈亮時，則檢查光眼靈敏度，保證靈敏度不能低於 55。 When no cloth covers back sensor but B-SENSOR is on,check sensor sensitivity and ensure sensitivity is more than 55.
19	SAFE	安全指示燈 Safety switch indicator	


## 如何進入參數與如何修改參數

系統參數進入解析：


長按 (  ) 鍵持續 2 秒鐘進入“系統參數”

清單 ( 需要密碼進入調整 ) 。 (  ) (  )

) 鍵將選取修改的是參數值還是菜單值，按後

選取的地方將會出現閃爍。 (  ) (  )

) 鍵將增加或減少閃爍區的數值。

修改完畢參數後需要按 (  ) 鍵保存參數



並退出系統參數。




※ 以上是進入方法，具體參數號代表的參數意思詳情如下：


※ 出廠值密碼：2014

## HOW TO ENTER PARAMETERS AND HOW TO MODIFY THE PARAMETERS

System parameter entering analysis:

Long press (  ) button for 2 seconds to enter the “System Parameter” list (requires a password to enter the adjustment). (  )

(  ) key to select to modify parameter value or menu value. Then, the selected value will be flashing. (  ) (  ) key to increase or decrease the value.

After completing modification, press (  ) button to save parameters and quit system parameters.

※ Above is to enter method, the details of specific parameters describe as followings:

※ Factory default Password: 2014

## 指令引數說明表

## OPERATING PARAMETER DESCRIPTION TABLE

技術員系統參數清單

Technician system parameter list

序號 System parameter list	功能說明 Function description	功能參數 調整範圍 Parameter Adjustment range	功能參數 預設值 Parameter default values	參數說明 Parameter description
S1	針跡 Thread track	ECA/ECB: 1~4	ECA/ ECB: 3	
S2	兩感測器間針數 Stitch number between two sensors	1~50	20	設定兩個光眼之間的針數 Set stitch number between two sensors



S3	前剪線延時針數 Delay stitch number to cut thread after front sensors	VTE:0~50 ECA/ECB: 0~100	VTE:4 ECA/ECB:26	後面光眼感應到後延遲剪線的針數 Set delay stitch number after passing front sensors.Auto cut thread after stitches
S4	雙光眼後剪線延遲針數 Delay stitch number to cut thread after two sensors	VTE:0~50	VTE:12	後面光眼離開後延遲剪線的針數 Set delay stitch number after passing two sensors.Auto cut thread after stitches
	三光眼後剪線延遲針數 Delay stitch number to cut thread after three sensors	VTE:0~50 ECA/ECB: 0~100	0	
S5	前吸氣開啟針數 Delay stitch number for starting front air suction	VTE:1~50 ECA/ECB: 0~50	VTE:2 ECA/ECB:1	感應到第一個光眼後從第幾針開始吸氣 Set delay stitch number for starting air suction after triggering first sensor
S6	前吸氣關閉針數 Delay stitch number for stopping front air suction	VTE:1~50 ECA/ECB: 1~500	14	打開後，計數幾針後關閉吸氣 Set delay stitch number for stopping air suction after starting front suction
S7	後吸氣開啟針數 Delay stitch number for starting back air suction	VTE:1~50 ECA/ECB: 0~50	2	離開後光眼後第幾針開始吸氣 Set delay stitch number for starting air suction after triggering back sensor
S8	後吸氣關閉延時 Delay time for stopping back air suction	VTE:100~5000 ECA/ECB: 50~5000	200	離開光眼後，計數幾毫秒後關閉吸氣 Set delay time for stopping air suction after starting back suction
S9	前鬆線延遲開啟 Enable delay of front loosening thread	ECA/ECB: 0~100	ECA/ECB:0	
S10	前鬆線針數 Stitch number before front loosening thread	ECA/ECB: 1~100	ECA/ECB:12	
S11	後鬆線延遲開啟 Enable delay of back loosening thread	ECA/ECB: 0~100	ECA/ECB:0	
S12	停車延遲針數 Delay stitch number after stopping pin	1~99	VTE:2 ECA/ECB:1	剪完線後多少針自動停車 Set delay stitch number for stopping pin after cutting thread
S13	中吸氣開啟針數 Stitch number before long suction	VTE:1~250 ECA/ECB: 0~1000	50	離開前光眼多少針後吸氣 Set stitch number for long suction before leaving front sensor
S14	中吸氣關閉針數 Stitch number after long suction	VTE:1~100 ECA/ECB: 1~800	20	吸氣針數 Set stitch number after long suction

S15	後剪光眼（三光眼） 延遲針數 Delay stitch number before back cutting	VTE:1~100 ECA/ECB: 0~100	25	離開中光眼後經過多少針後沒檢測 到第三光眼信號就開始剪線 Set delay stitch number for cutting thread after leaving medium sensor without triggering third sensor
S16	前感測器回應時間 Response time of front sensor	VTE:1~100 ECA/ECB: 1~1000	40	前面光眼感應到後回應的時間 Response time after triggering front sensor
S17	前感測器靈敏度 Front sensor sensitivity	VTE:20~175 ECA/ECB: 5~100	VTE:55% ECA/ ECB:67%	為適應不同布料設定前光眼的透布強 度 Let front sensor adapt different cloth material with different transparency
S18	後感測器靈敏度 Back sensor sensitivity	VTE:20~175 ECA/ECB: 5~100	VTE:55% ECA/ ECB:53%	為適應不同布料設定後光眼的透布 強度 Let back sensor adapt different cloth material with different transparency
S19	前抬壓腳保留時間 Retention time for front lifting presser foot	100~2000MS	220	抬壓腳抬起後持續的時間（毫秒） Set duration time(milli-sec) for lifting presser foot after triggering sensor
S20	後抬壓腳啟動時間 Response time for latter lifting presser foot	0~2000MS	0	腳踏板後踏壓腳回應的時間（毫秒） Set response time(milli-sec) for lifting presser foot after back pedaling
S21	抬壓腳保護時間 Protection time for lifting presser foot	1~120S	6	手動抬壓腳持續多少時間後關閉 （秒） Set retention time(sec) of manual lifting presser foot
S22	放壓腳保護時間 Protection time for lowering presser foot	20~800MS	20	放壓腳時間（毫秒） Time for lowering presser foot(milli- second)
S23	連續送布吸氣剪線 Continuous feed cloth air suction and then cut thread	0~1	0	0：關閉 1：開啟 0:Close 1:Open
S24	運轉中手動開關動 作 Enable running manual switch	VTE:0~1 ECA/ECB:0~2	1	0：電機運轉時按手動剪線不剪，1： 可以剪 0:When the motor is running, press manual switch and then 0:no cutting, 1:cutting
S25	安全開關選擇 Safety switch	0~3	3	0：關閉安全開關 1：縫台安全開關 2：壓腳安全開關 3：開啟安全開關 0: close safety switch 1:seam safety switch 2:presser foot safety switch 3: open safety switch
S26	切刀保留時間 Cutter retention time	1~1000MS	35	切刀動作時間（基本不用調整） Cutter action time (normally needlessly adjusted)

S27	介面恢復時間 Recovery time	5~100S	5	控制台在進入功能表後多少時間 跳回主介面 Set recovery time from technician table to worker table
S28	光眼模式 (數量選擇) Sensor Mode(quantity selection)	1~2	2	1 單光眼 2 雙光眼 1:on sensor 2:double sensors
S29	前光眼極性選擇 F-SENSOR polarity	0~1	0	下反射極性相反 F-SENSOR LED polarity
S30	後光眼極性選擇 B-SENSOR polarity	0~1	0	下反射極性相反 B-SENSOR LED polarity
S31	壓腳全功率時間 Full power time of presser foot	10~990MS	180	壓腳全功率工作時的時間 Time of full power operation for presser foot
S32	壓腳全功率時功率 Full power capacity of presser foot	20~100%	100	壓腳開始動作時，瞬間的輸出功率 Set instantaneous output power when presser foot starts to move
S33	壓腳保持功率 Retention power of presser foot	10~90%	25	壓腳抬起後維持住後的功率（不能 超過 50） Set power value to keep presser foot lifting (no more than 50)
S34	後剪光眼靈敏度 (剪刀邊上) Sensor sensitivity for back cutter(near the cutter)	VTE:5~99% ECA/ECB: 2~100%	VTE:55 ECA/ ECB:49	
S35	後剪光眼開啟 (剪刀邊上) Enable sensor for back cutter (near the cutter)	0~1	1	0：關閉 1：開啟 0: closed 1: open
S36	預留 Reserved	0~26	1	
S37	語言選擇 Language selection	VTE:0~2 ECA/ECB:0~3	0	0：中文 1：英文 2：土耳其 3：越語 0:Chinese 1:English 2:Turkey 3:Viet Nam
S38	最大速度鎖定 Max speed lock	250~6500	VTE:4800 ECA/ ECB:6500	電機的最大可調速度限制 Maximum adjustable speed limit for machine
S39	參數復位 Parameter Restoration	0~1	0	調到 1 長按  鍵有效 Set 1 and long press  Then,system will restore parameters

工人系統參數清單（按  鍵進入）

Worker system parameter list (Press  enter)

序號 System parameter list	功能說明 Function description	功能參數 預設值 Parameter default values	功能參數 範圍 Parameter ranges	參數說明 Parameter description
P-01	操作模式 Operator mode	0	0~1	0：半自動 1：全自動 0: semi automatic 1: fully automatic
P-02	電眼開關 IR sensor switch	1	0~1	0：關閉 1：開啟 0:Closed 1:Open sensor
P-03	剪線 Auto cutting	3	0~3	0：關閉 1：前剪線 2：後剪線 3：前後剪線 0: close 1: front cutting 2: rear cutting 3: front and rear cutting thread
P-04	吸氣 Auto air suction	3	0~3	0：關閉 1：前吸氣 2：後吸氣 3：前後吸氣 0: closed 1: front suction 2:rear suction 3: front and rear suction
P-05	後拖輪 Back puller	0	0~2	0：關閉 1：縫製中 2：縫製後 0: close 1: in sewing 2: after sewing
P-06	壓腳 Auto presser foot	VTE:3 ECA/ ECB:1	0~3	0：無抬壓腳 1：前抬壓腳 2：後抬壓腳 3：前後抬壓腳 0: no lifting 1: front lifting 2: rear lifting 3: front and rear lifting presser foot
P-07	啟動速度模式 Speed mode	1	0~1	0：自動 1：腳踏板 0: automatic 1: pedal
P-08	停車針位 Stop pin position	0	0~1	0：上針位 1：下針位 0:Upper 1: down stop pin position
P-09	停車自動抬壓腳 Automatic lifting presser foot after stopping pin	0	0~1	0：關閉 1：開啟 0:Closed 1:Open
P-10	手動吸氣 Manual air suction	1	0~1	0：關閉 1：開啟 0:Closed 1:Open air suction
P-11	啟縫速度 Start speed	VTE:4500 ECA/ECB: 5500	200~5500	
P-12	最大速度 Maximum speed	VTE:4500 ECA/ ECB:6500	VTE: 200~4800 ECA/ECB: 200~6500	
P-13	工作燈亮度 B.H.Light	4	0~5	Working LED brightness

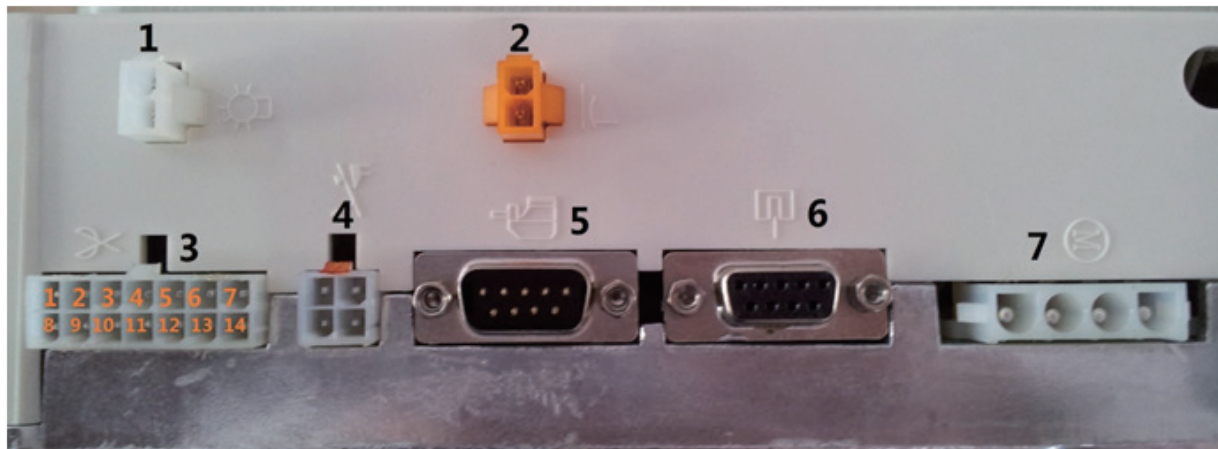
P-14	背光燈亮度 B.B.Light	1	0~1	0：關閉 1：開啟 0:Closed 1:Open background brightness
P-15	半自動連續縫製 Semi automatic continuous sewing	0	0~1	0：關閉 1：開啟 0:Closed 1:Open
P-16	半自動恒速剪線 Semi-automatic constant speed thread cutting	0	0~1	0：關閉 1：開啟 0:Closed 1:Open
P-17	前放壓腳 Front release presser foot	0	0~1	0：自動模式 1：手工模式 0: automatic mode 1: manual mode
P-18	腳控剪線 Manual cutting thread	0	0~2	0: 關閉 1：全手工 2：自由縫半自動 0: closed 1: full manual 2: free stitch (semi-automatic)pedal cutting
P-19	中吸氣 Long Suction	0	VTE:0~1	0: 關閉 1：開啟 0:Closed 1:Open suction when cloth is in process
		0	ECA/ ECB:0~2	0: 關閉 1：間隔吸 2：長吸氣 0:Closed 1:Internal suction 2:Long suction
P-20	半後踏抬壓腳 Enable half back pedal to lift presser foot	0	0~1	0：關閉 1：開啟 0:Closed 1:Open
P-21	剪線後抬壓腳 Lift presser foot after cutting thread	0	0~1	0：關閉 1：開啟 0:Closed 1:Open
P-22	關閉手動抬壓腳 Close manual lifting presser foot	0	0~1	0：關閉 1：開啟 0:Closed 1:Open
P-23	自由縫開啟 Enable free sewing	0	0~1	0：關閉 1：開啟 0:Closed 1:Open
P-24	後剪線光眼延遲檢測 Delay cut before cloth leaves back sensor	1	0~1	0：關閉 1：開啟 0:Closed 1:Open cutting thread delay when cloth leaves back sensor
P-25	鬆線 Loose thread	ECA/ ECB:3	ECA/ ECB:0~3	0：關閉 1：前鬆線 2: 後鬆線 3” 前後鬆線 0:Closed 1:front 2:back 3:fro+back loose thread
P-26	自動跑合運行 Automatic test	0	0~1	0：關閉 1：開啟 0:Closed 1:Open
P-27	自動跑合執行時間 Automatic test time	4	3~20	時間單位為：秒 Time unit : second
P-28	自動跑合運行停止時間 Automatic Test Interval	2	2~20	時間單位為：秒 Time unit : second
P-29	電控版本號 System version number	V2.14 (ECA/ECB)		
P-30	顯示幕版本號 Display panel version number	V2.12 (ECA/ECB)		

## 控制箱埠說明

## CONTROL BOX PORT DESCRIPTION

技術員系統參數清單

List of system parameters for technicians



埠號碼 Port Number	埠連接的器件名稱 Port connector name
1	5V 電源 LED 機頭燈插孔，吸風剪線配套時埠無效 5v power LED socket. Port is invalid when enabling continuous feed,suction and cutting.
2	抬壓腳控制埠，連接壓腳電磁鐵（30V） Lifting foot control port, connecting to electromagnet of presser foot (30V)
3	14P 多功能埠（詳情見 14P 多功能埠定義篇幅） 14P multi function port (details in No.3 14P multi-functional port)
4	調速器埠，連接調速器 Governor port, connecting to speed regulator
5	連接吸風剪線顯示控制台埠 Connect to display control panel port for air suction and thread cutting
6	連接電機相位信號線埠 Connect to motor phase signal port
7	連接電機 4 線驅動線埠 Connect to motor 4 wire drive port

3 號 14P 多功能埠

No.3 14P Multifunction port

3 號多功能埠標號 No.3 multifunction port label	功能 Function
3，10	3：壓腳輸出 Presser foot output 10: 30V
6，13	6：吸風輸出 Air suction output 13: 30V
7，14	7：剪刀輸出 Cutter output 14: 30V

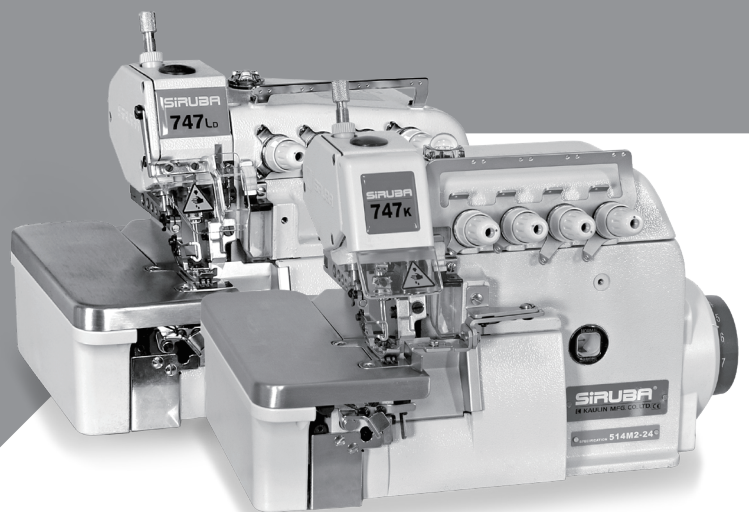


## 故障代碼解析

## ERROR CODE ANALYSIS

故障代碼 Fault code	故障描述 Fault description	故障產生原因 Causes of failure	故障的解決方法 Fault solution
ER-01	找不到停針位 Can not find the position of stop pin	1: 手輪和電機靠的不夠近 2: 手輪上磁鋼脫落 3: 手輪磁鐵極性裝反 4: 九針端子頭接觸不良 5: 電機霍爾損壞 1: Hand wheel and motor is not close enough. 2: Magnetic on hand wheel separates 3: Hand wheel magnet polarity is wrong 4: Contact error for 9-pin connector. 5: Motor holzer damage	1: 檢查電機信號線有無鬆動 2: 更換手輪 3: 更換電機 1: Check whether the motor signal line is loose 2: Replace hand wheel 3: Replace the motor
ER-02	調速器信號錯誤 Governor signal error	1: 開機時沒插調速器 2: 調速器插反 3: 調速器線斷開 4: 調速器損壞 1: Boot up without connecting governor 2: Governor connects opposite 3: Governor line damage 4: Governor damage	1: 檢查調速器信號線 2: 更換調速器 3: 更換控制箱 1: Check the governor signal line 2: Replace the governor 3: Replace control box
ER-03	電機相位信號錯誤 Motor phase signal error	1: 九針插頭接觸不良 2: 電機安裝時霍爾和轉子存在大偏差 3: 電機霍爾損壞 1: Contact error for 9-pin connector 2: Serious installation deviation between holzer and rotor 3: Motor holzer damage	1: 打開電機上的橡皮蓋通過孔看電機轉子與定子是否在同一平面保障誤差不超過 1mm 2: 更換電機 3: 更換控制箱 1: Open the rubber cover on the motor. See whether the motor rotor and stator in the same plane and ensure the deviation is no more than 1mm 2: Replace the motor 3: Replace the control box

ER-04	電機堵轉保護 Motor locked rotor protection	1：縫紉機過重或堵死 2：電機超載 3：電機 4 線驅動線沒連接好或插反 1: Sewing machine is overweight or blocked 2: Motor overload 3: Motor 4 wire drive line is not connected well or inserted oppositely	1：檢查電機 4p 線 2：檢查縫紉機是否過重 3：更換控制器 1: Check motor 4p line 2: Check whether sewing machine is overweight 3: Replace the control box
ER-05	硬體過流保護 Hardware overcurrent protection	1：縫紉機過重或堵死 2：電機超載 3：電機相位信號線沒連接好 1: Sewing machine is overweight or blocked 2: Motor overload 3: Motor phase signal line is not connected well	1: Check motor 4p line 2: Check whether sewing machine is overweight 3: Replace the control box
ER-07	串口通訊超時 Serial Communication Timeout	1：顯示幕連接主機板線連接不良 2：主機板晶片損壞 1: Connect error between display panel and mainboard 2: Mainboard chip damage	1：檢查顯示幕與控制器連接線 2：檢查控制器是否還可運行，如不能運行就是控制器損壞 3：檢查機器旁是否有高頻機器干擾 4：更換顯示幕 1: Check the connection line between display panel and control box. 2: Check whether the controller run well. If not, controller damage 3: Check whether there is a high frequency machine near the machine interference 4: Change display panel
ER-09	記憶體不良 Memory error	1：主機板記憶體損壞或不良 1: Memory on mainboard damage or error	1：控制器損壞 1: Control box damage
ER-10	光眼控制線路故障 Sensor control line error	1：顯示幕連結光眼線路不良 1: Connect error between display panel and sensor.	1：顯示幕損壞 2：顯示幕背部光眼連接線接觸不良 1: Display panel damage 2: Connect error between display panel and sensor



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The specification and/or appearances of the equipment described in this instruction book & parts list are subject to change because of modification which will without previous notice.  
KZ08-U1.APR.2021