

SV-82

INSTRUCTION MANUAL

SV-82 系列 操作說明書

Rev – 3E

For safe operation

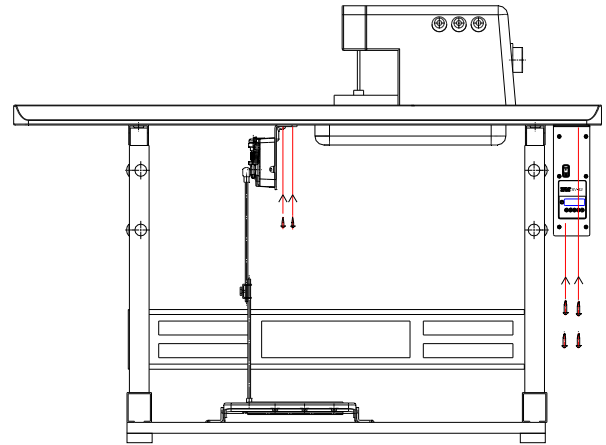
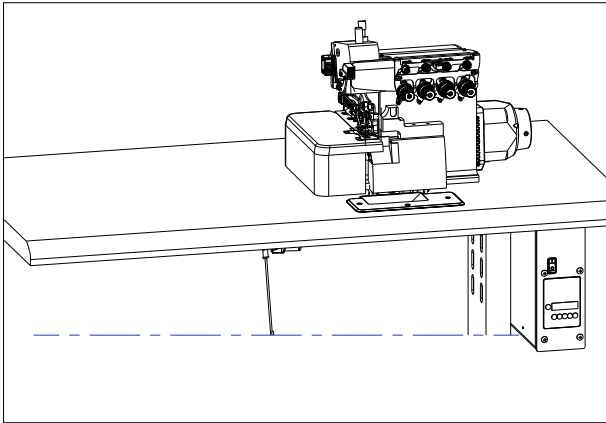
重要安全事項

1. Prior the use of this product, please read the instruction Manual. Keep this Instruction Manual and the user may read it at anytime when necessary.
使用本產品前,請先閱讀本說明書;同時應將此說明書妥善保管以便能隨時查閱 .
2. Before turn on the power, be sure to check the power voltage and phase agreeing with the nameplate that indicated in the control box.
電源開啓前,請先確認電源的電壓與相數,是否與控制箱銘牌相符.
3. Grounding the machine is always necessary for safe and normal operation.
爲了正常安全運轉,須安裝地線.
4. Check lubricating oil prior to operation.
操作前,請先確認縫紉機潤滑油充足.
5. Check that rotational direction of the motor is correct prior to operation.
操作前,請先確認馬達轉動方向正確.
6. So as to prevent personal injuries during operation, be careful not to allow your head and hands to come close to the moving parts. Also never try to stop it with external forces.
使用中,切勿將頭,手靠近皮帶輪,皮帶,旋梭,天平等移動部份;同時也不可以用外力,強制停止移動部份.
7. For the following conditions, turn off the power or disconnect the power plug from receptacle.
發生下列情況時,應立即關閉電源開關或者拔下電源插頭:
 - 7.1 For threading needle or replacing bobbin.
穿線和更換旋梭時.
 - 7.2 To plug or unplug any connectors from control box.
插拔控制箱上任何連接線與接頭.
 - 7.3 For maintenance and repairing.
保養與修理時.
 - 7.4 When machine is not at use, inspected or adjusted.
翻抬針車頭,取下皮帶時. 檢查或調整車頭時 或機器不用時
 - 7.5 When lightning and thunder occurs.
打雷閃電時.
8. Repairing, remodeling and adjusting works must only be done by appropriately trained technicians or specially skilled personnel.
本產品的修理,改造,調整;應由受過專門訓練的技術人員來進行.

I. Set up 安裝

1. For control box set up

控制箱的安裝:



Dimensions of control box as shown in Fig.1

控制箱的外型尺寸如圖(一)所示:

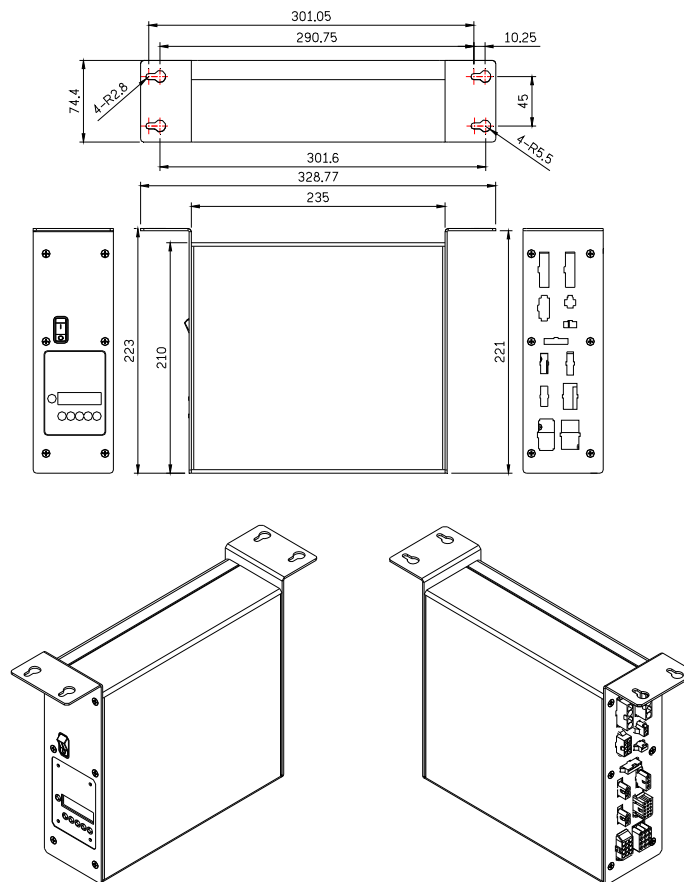


Fig.1 (圖一)

2. Connector position and function

接頭位置與功用:

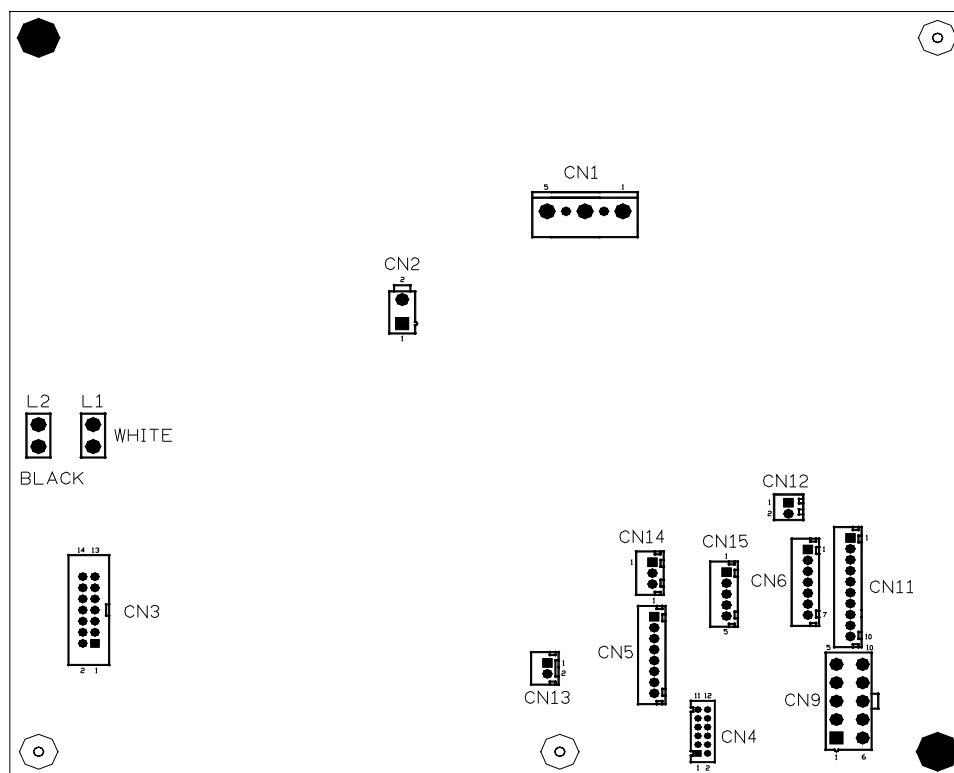
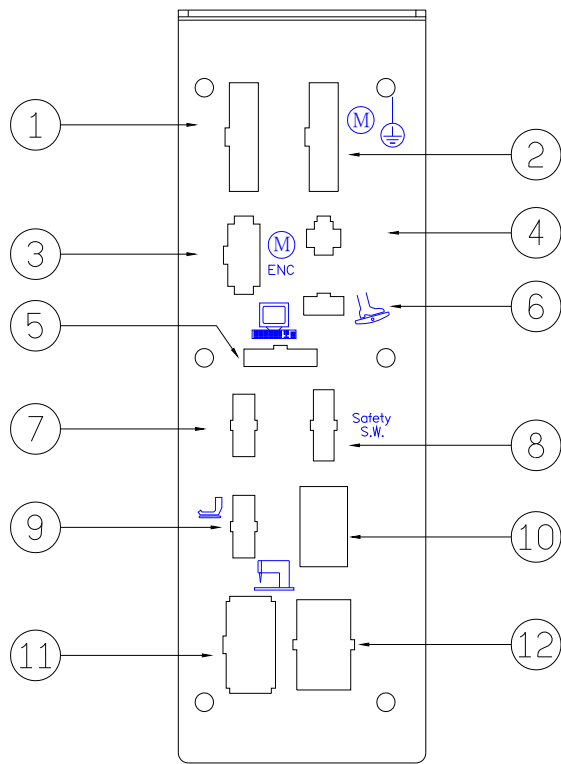


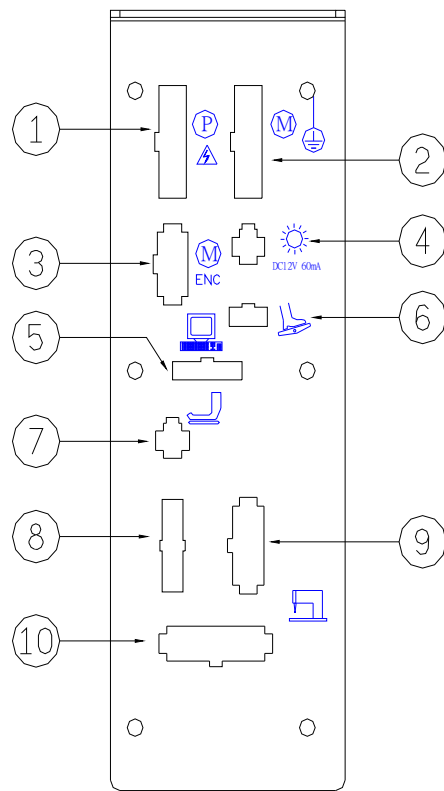
Fig.2 (圖 二)

接頭 Connector	接頭說明 Connectors' description
CN2	水泥電阻接頭 Standing operation pedal connector
CN3	前蓋 C02 接頭. Front cover C02 connector
CN4	立式踏板接頭 Standing operation pedal connector
CN5	馬達編碼器接頭 Motor encoder connector
CN6	程式燒錄接頭 External Panel connector
CN9	車頭功能線圈接頭 Machine functions' connector
CN11	輸入信號接頭 Input port connector
CN12	+12V 電源輸出接頭 +12V Power output connector
CN13	速度基座接頭 Speed unit connector
CN14	安全開關接頭 Safety switch connector
CN15	布端檢出器接頭 Edge sensor connector

Table 1(表 一)



版本 1
Fig.3 (圖 三)



版本 2
Fig.4 (圖 四)

See Fig. 3

如圖(三)所示:

- 1.Power input cord connector.
- 1.電源輸入線接頭.
- 2. Motor power line connector.
- 2.馬達動力線接頭.
- 3. Encoder connector
- 3.馬達編碼器接頭
- 4.DC 12V 60mA output connector
- 4.直流 12V 60mA
- 5.External Panel connector
- 5.程式燒錄接頭
- 6. Pedal sensor connector
- 6.速度基座接頭
- 7. Sewing machine function connector1
- 7.車頭功能線圈接頭 1
- 8. Safety switch connector
- 8.安全開關接頭
- 9. Sewing machine function connector2
- 9.車頭功能線圈接頭 2
- 10.Sewing machine function connector3
- 10.車頭功能線圈接頭 3

See Fig. 4

如圖(四)所示:

- 1 Power input cord connector.
- 1.電源輸入線接頭.
- 2. Motor power line connector.
- 2.馬達動力線接頭.
- 3. Encoder connector
- 3. 馬達編碼器接頭
- 4. DC 12V 60mA output connector
- 4.直流 12V 60mA 輸出接頭
- 5. External Panel connector
- 5.程式燒錄接頭
- 6. Pedal sensor connector
- 6.速度基座接頭
- 7. Sewing machine function connector1
- 7. 車頭功能線圈接頭 1
- 8. Sewing machine function connector2
- 8.車頭功能線圈接頭 2
- 9.Standing operation pedal connector
- 9.立式踏板接頭
- 10.Sewing machine function connector3
- 10.車頭功能線圈接頭 3

11. Sewing machine function connector4

11.車頭功能線圈接頭 4

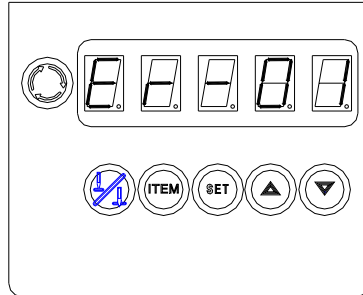
12. Sewing machine function connector5

12.車頭功能線圈接頭 5

II Error message indicator 錯誤訊息顯示:

When abnormal condition occurs, the error message will display as below figure.

當發生不正常狀況時，顯示畫面會將檢測出的錯誤訊息顯示出來。如圖所示:



Error message display:

錯誤訊息顯示:

Error Code	Description of error detected	Items to be checked
Er-1	Synchronizer failure	-Synchronizer connector is loose or line is broken.
Er-2	Motor is not rotating	-Machine head or motor is locked. -Motor power line or encoder line. is broken, or connector is loose. -IPM is failed
Er-3	Power failure	-Voltage is either too high or too low. -Fuse (F2) is burned out.
Er-4	Safety switch failure(chain stitch machine)	-Failure in safety switch connection. -Safety switch failure -Wrong setting for parameter No.35.
Er-5	Speed unit output failure	-Speed unit connector is loose -Speed unit is broken -Connecting rod installation is incorrect
Er-6	CPU error	-Noise interference (Ex. High frequency machine, welding machine) -Eeprom damaged
Er-7	Material edge sensor function is failed.	-Parameter No.42 wrong setting -Material edge sensor not properly adjusted -Connector for material edge sensor is loose - Material not properly settled through machine
Er-8	Setting speed over the motor maximum speed.	-Parameter No.1 setting value is too large -Motor pulley diameter is too small -Motor pulley ratio setting error
Er-9	IPM is failed.	-IPM overheated -Short circuit or low voltage of IPM

Er-10	Solenoid output is overload	-Solenoid resistance is too low - Transistor is failed
Er-11	Synchronizer down signal failure	-Synchronizer connector is loosen or line is broken. -Setting error for parameter No51 & 52
Er-12	Safety switch failure(overlock machine)	-Failure in safety switch connection. -Safety switch failure -Wrong setting for parameter No.35.

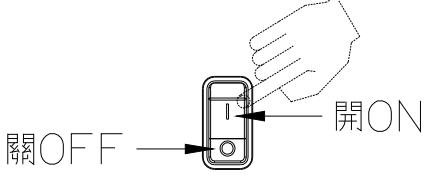
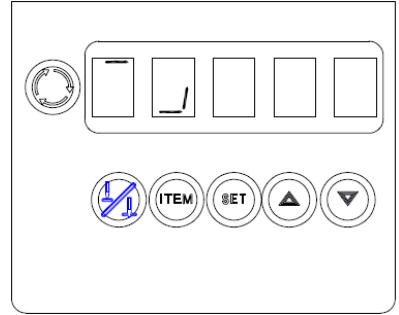




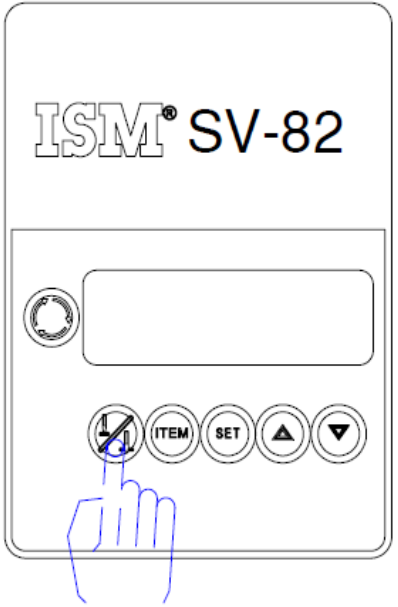
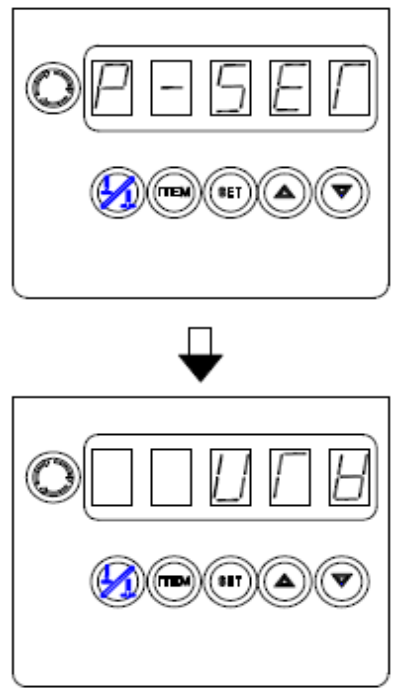




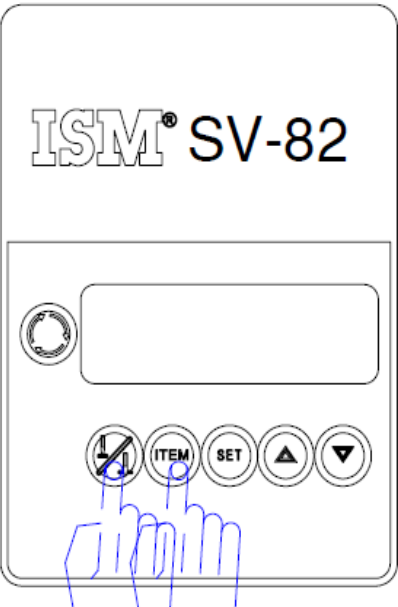
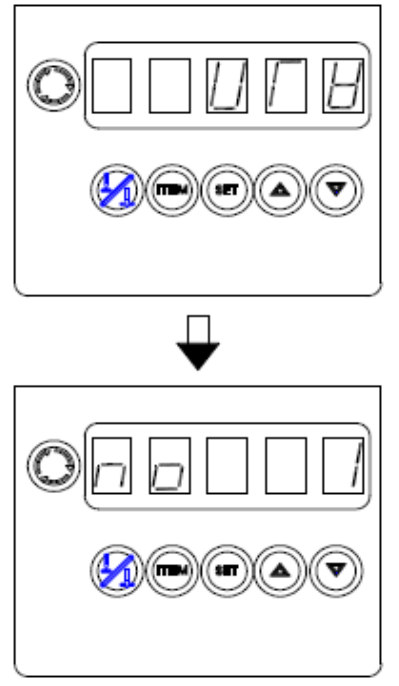
請依下表進行確認:


錯誤顯示	錯誤內容	確認項目
Er-1	同步器信號異常	同步器接頭鬆脫,斷線; 皮帶沒有傳動針車頭.
Er-2	馬達不動	針車頭鎖死 馬達鎖死 馬達接頭鬆脫(動力線與編碼器線) IPM 輸出異常
Er-3	電源異常	外部電壓太高,太低 保險絲(F 2)燒斷.
Er-4	安全開關異常(鏈縫車)	安全開關接點異常, 安全開關連接線鬆脫 參數 NO.35 設定錯誤
Er-5	開機時速度基座準位異常	速度基座接頭鬆脫 連接桿安裝不適當, 速度基座故障
Er-6	當機	雜訊源干擾.(高週波 ,電焊機) EEPROM 故障
Er-7	布端檢出功能異常	參數 NO.42 設定錯誤 布端檢出器調整不良 布端檢出器連接線鬆脫,斷線 待車物料擺放位置不適當
Er-8	最高轉速設定超過馬達的最快速度	參數 NO.1 設定值太大 馬達皮帶輪尺寸太小 馬達皮帶輪比設定錯誤
Er-9	功率晶體模組故障	功率晶體模組過熱 功率晶體模組輸出短路 供應功率晶體模組的電壓太低
Er-10	週邊輸出過載	線圈阻抗太低 控制週邊輸出的電晶體故障
Er-11	同步器下停信號異常	同步器接頭鬆脫,斷線; 皮帶沒有傳動針車頭. 參數 No51 & 52 設定錯誤
Er-12	安全開關異常(拷克車)	安全開關接點異常, 安全開關連接線鬆脫 參數 NO.35 設定錯誤


III Setting way 設定方式

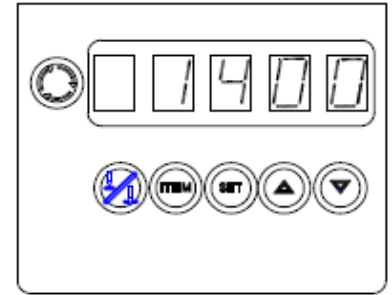
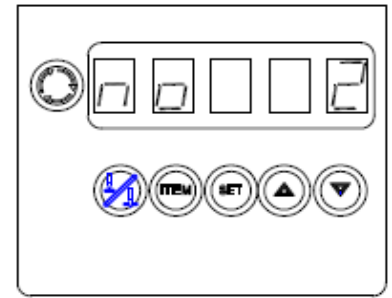
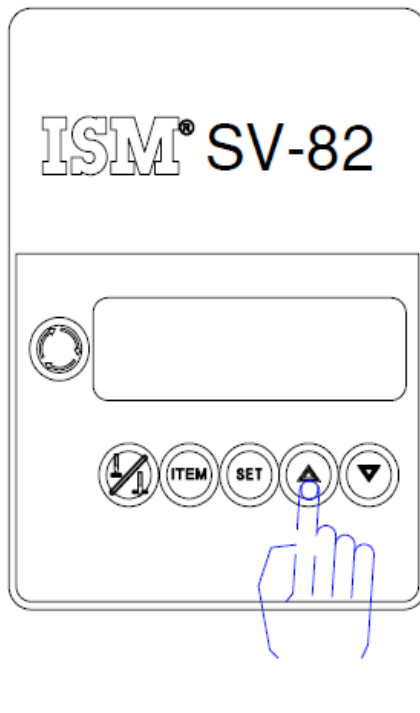
1.Parameter setting:


參數設定方式:


<p>1. Turn ON the power. 1. 開啓電源.</p>		
<p>2. Press  key exceed 2 second until display “ P-SET “ , then release  key , the selected machine type display twinkled .</p> <p>按住  上下停鍵超過 2 秒，出現 P-SET</p> <p>放開  上下停鍵，所選定的針車頭選項閃爍顯示。</p>		
<p>3.</p> <p>3.1 Press  key, thus parameters no. will be cycled decreased.</p> <p>按  上下停鍵，則參數號碼循環遞減.</p> <p>3.2 Press  key, thus parameters no. will be cycled increased.</p> <p>按  鍵，則參數號碼循環遞增.</p>		

4. Once the modifying parameter has been found, press  key, and the relative parameter setting will display accordingly

4 找到想要修改之參數號碼,按  鍵,則顯示該號碼相對應之參數值.




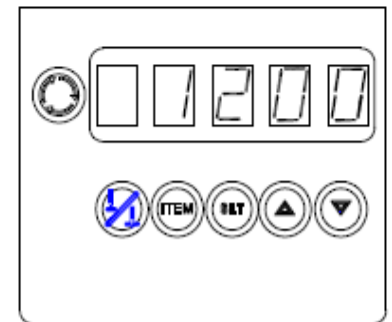
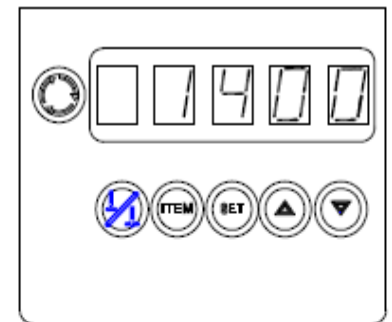
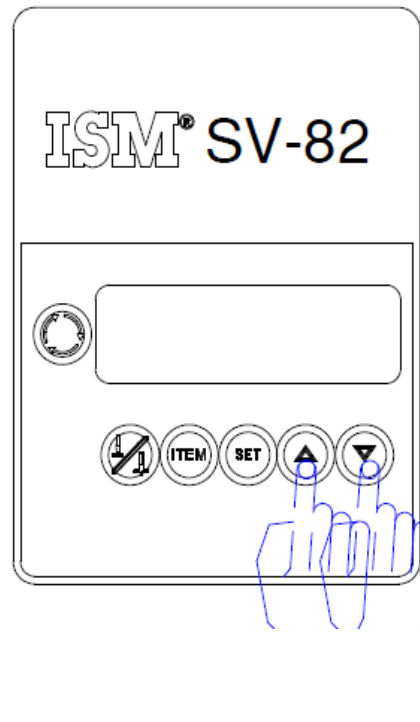
5. Press  key to increase parameter value.





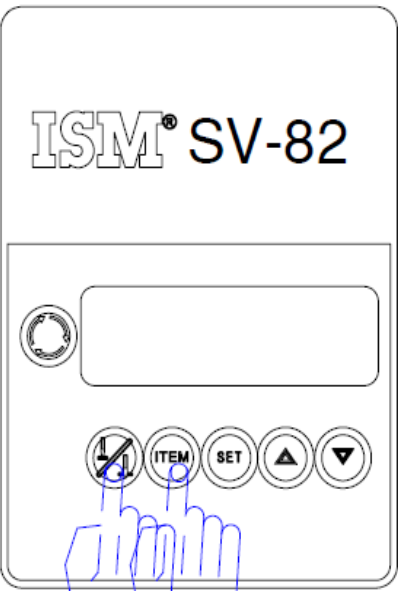
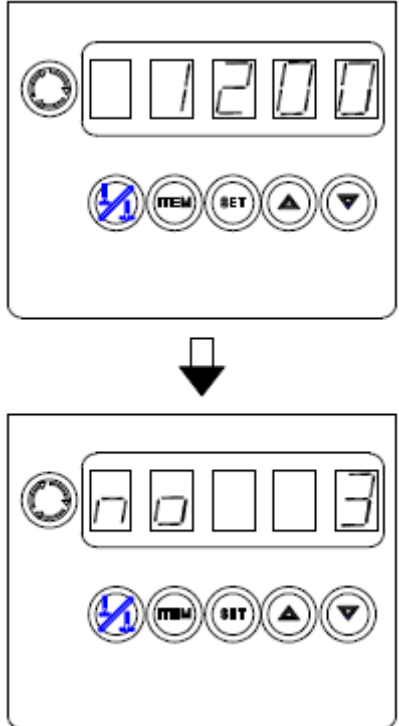
Press  key to decrease parameter value.



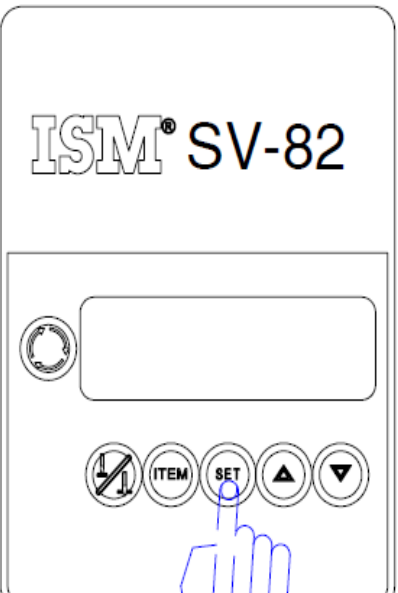
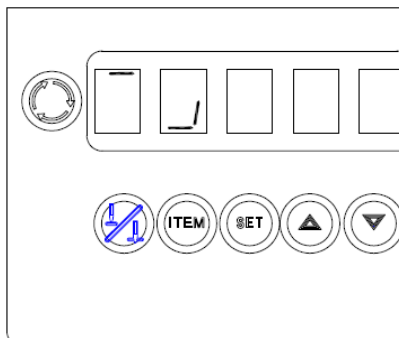
If you keep the key pressed, it will be continuously changing for new parameter values.

5. 按  鍵增加參數值

按  鍵減少參數值
持續按住按鍵,連續更新參數值.

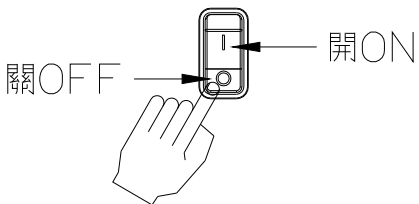
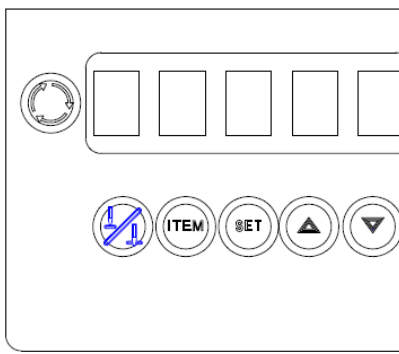






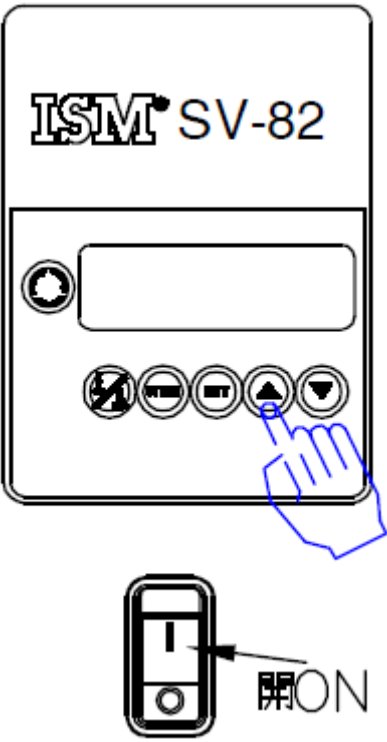
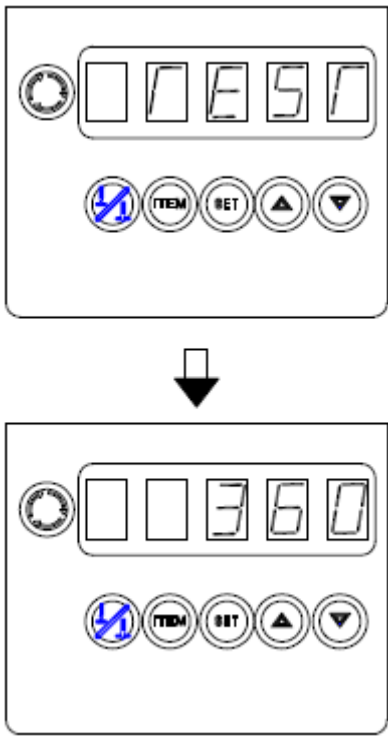
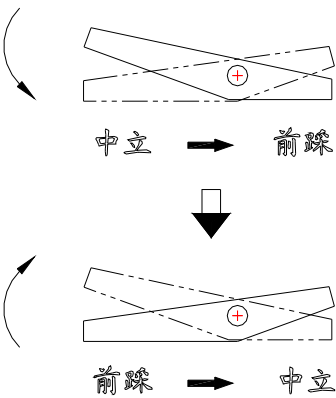
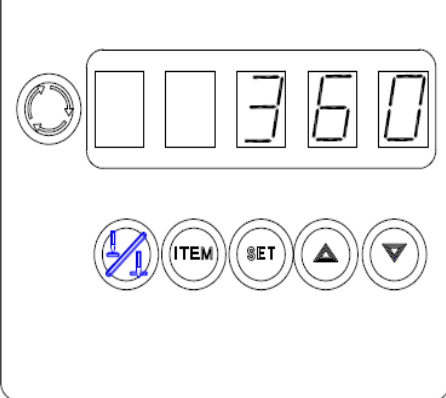
<p>6. Pressing  key or  key can select for the next parameter no. repeat steps 3~5 to modify parameter value.</p> <p>按  鍵或  鍵可顯示下一組參數號碼，重覆步驟 3~5 選擇下一組要修改之參數。</p>		
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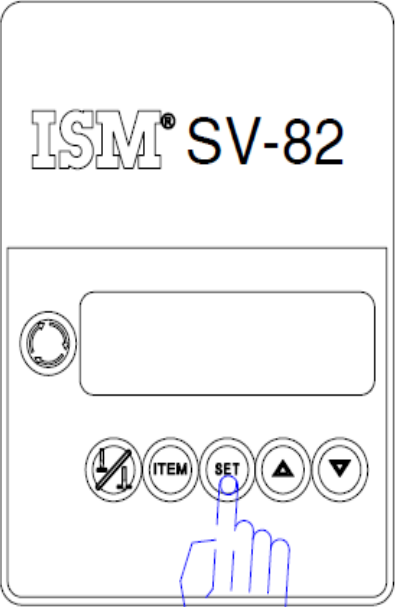
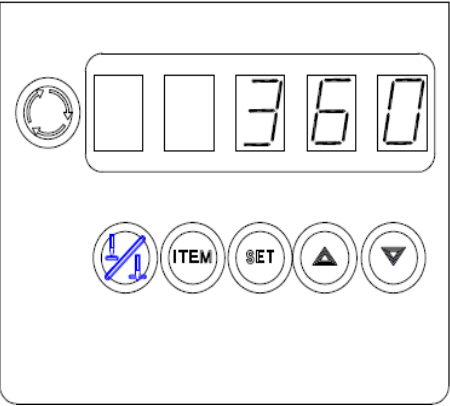
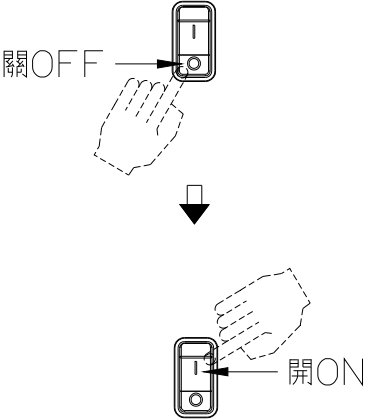
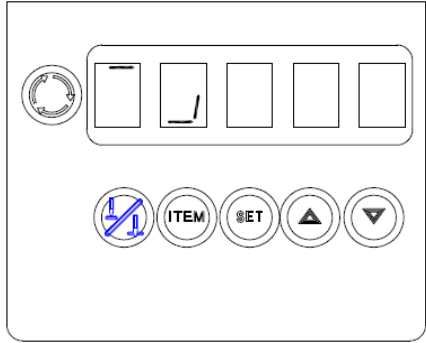
<p>7. Once all specified value has been changed, press  key to save. If this procedure is not performed, the specified value will not be updated.</p> <p>7. 當所有參數修改完畢後按  鍵，會將修改後之參數內容儲存；回到正常操作畫面。如果沒有進行參數儲存動作就關閉電源，則無法更新參數。</p>		
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2. Motor pulley ratio measurement :

馬達皮帶輪比量測:

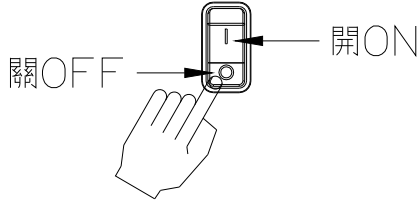
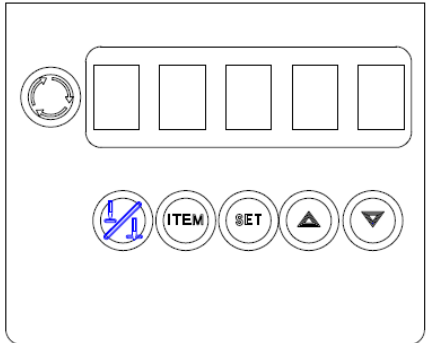
<p>1. Turn OFF the power.</p> <p>1. 關掉電源。</p>		
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<p>2.</p> <p>Press  key, then turn ON the power.</p> <p>Release  key.</p> <p>2.</p> <p>按住  鍵,同時打開電源.</p> <p>畫面出現 TEST</p> <p>放開  鍵.</p> <p>畫面出現存在 EEPROM 中的皮帶輪比.</p>		
<p>3. If the display is not as shown above, please repeat steps 1-2.</p> <p>3.如果顯示畫面與上述不同,請重覆步驟 1~2.</p>		
<p>If the pedal is forwardly pressed, the motor will rotate 7 turns in positioning speed. After the motor stop, the motor pulley ratio will be displayed.</p> <p>(Sewing machine 360°=motor ? degrees). The step 4 can be repeated to confirm.</p> <p>4.踏板前踩一下,馬達以定位速度運轉7圈馬達停止後,畫面會顯示所量測的馬達皮帶輪尺寸比 (針車頭一圈 360 度=馬達?度) 可以重覆步驟 4 ,再進一步確認.</p>		


<p>5. Press  key to save. If this procedure is not performed, it will remain as the old values.</p> <p>5. 按  鍵, 會將此一皮帶輪比儲存; 如不進行此步驟, 則無法更新內容 .</p>		
<p>6. Turn OFF the power then re-turn ON the power, It will operate according to new pulley ratio values .</p> <p>6. 關掉電源, 再打開電源, 將以最新的馬達皮帶輪比設定運作.</p>		

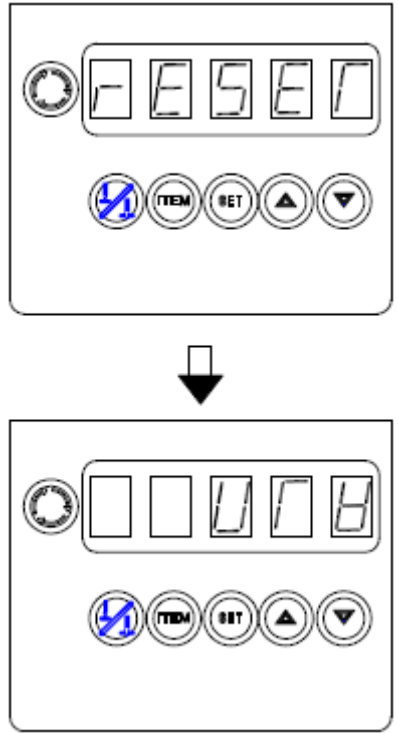
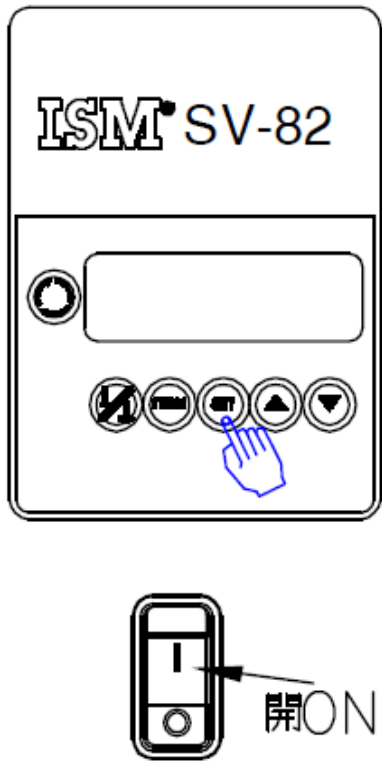
3. Select the machine type :

選擇針車頭選項:

<p>1. Turn OFF the power.</p> <p>1. 關掉電源.</p>		
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2. Press  key simultaneously , then turn ON the power , until rESET displayed then release the key .



2. 按住  鍵，同時打開電源，直到畫面出現 rESET 才將按鍵放開出現第一個針車選項。

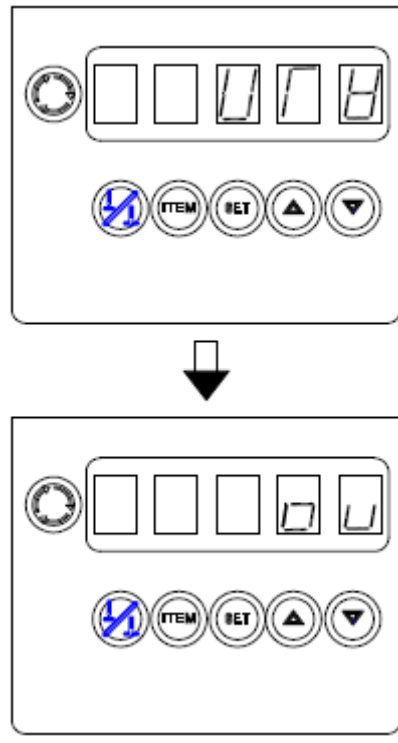
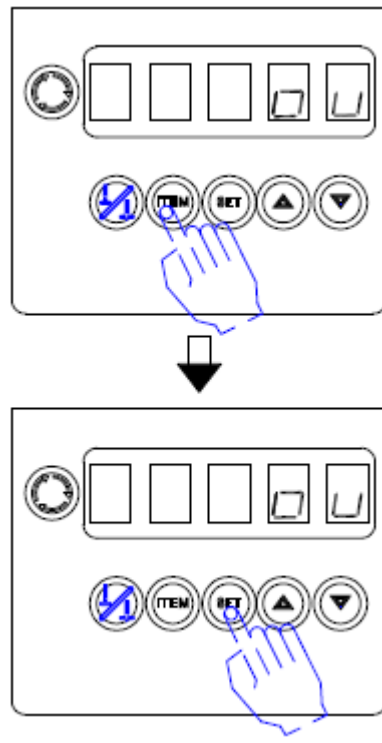


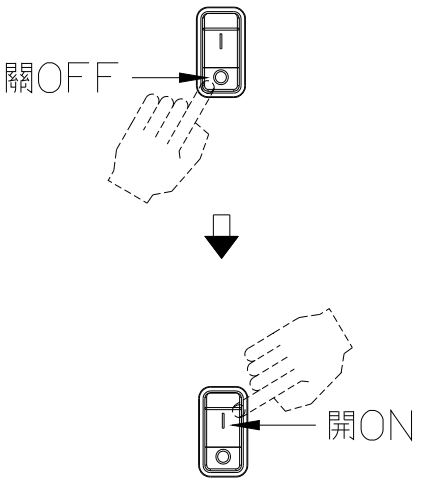
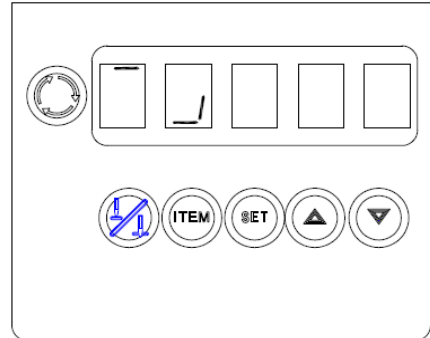
3. If it is not displayed as shown above , please repeat steps 1-2 .

3. 如果顯示畫面與上述不同，請重覆步驟 1~2 。

4. Press  key to select machine type ,then press  key .

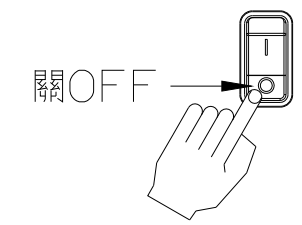
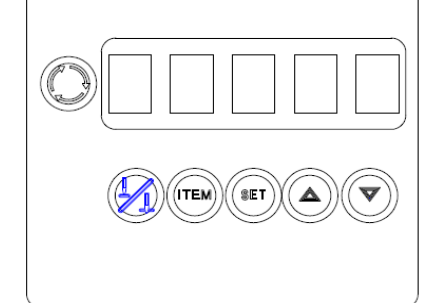




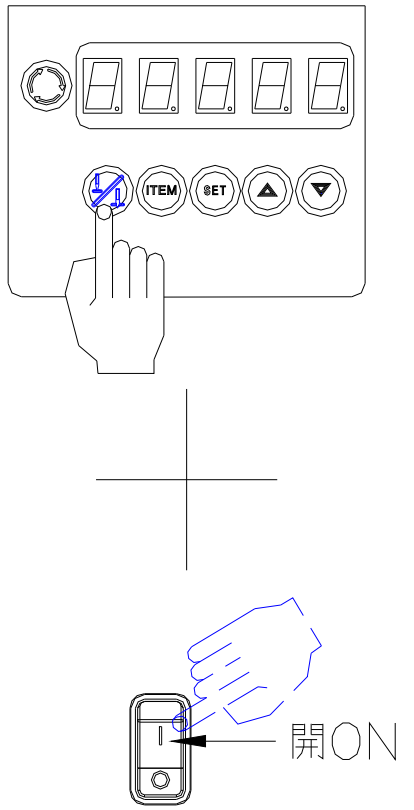
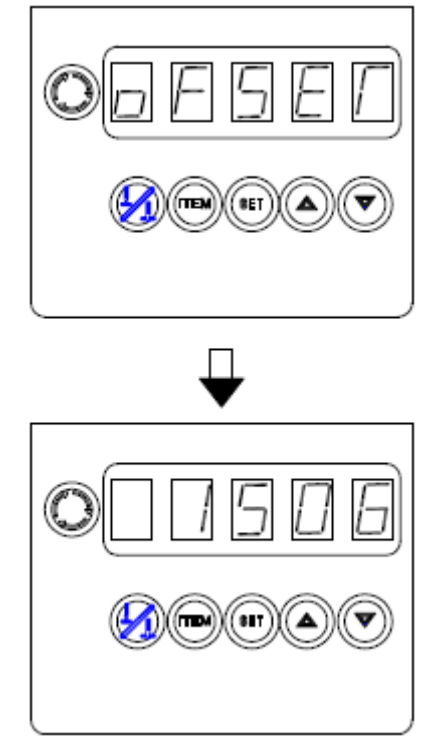
4. 按  鍵，選擇要設定的針車模式後,按下  鍵。







<p>5. Turn OFF the power , then turn ON the power again , It will operate according to the manual's instruction initial value .</p> <p>5. 關掉電源，再打開電源，程式將以所選定的針車選項特性來運作。</p>		
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4. Pedal sensor neutral point setting mode

速度基座中立點設定模式:

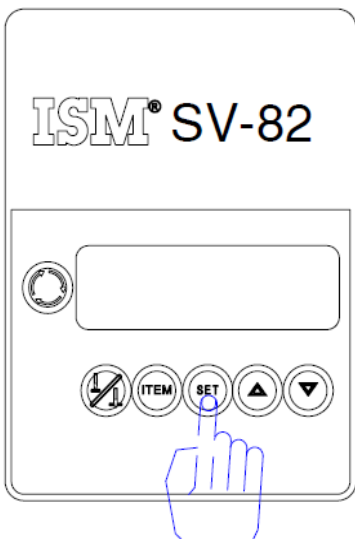
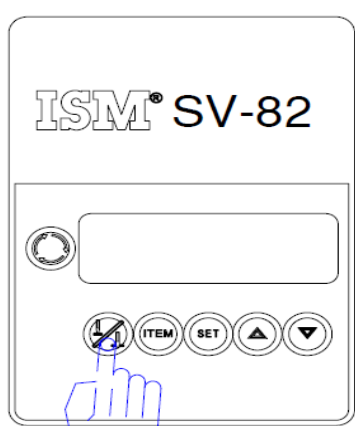
<p>1. Turn OFF the power</p> <p>1 關掉電源.</p>		
<p>2. Set pedal sensor in the neutral point. Press  key, then turn ON the power simultaneously and display “OFSET”.</p> <p>2. 將速度基座置於中立點， 按住  鍵，同時打開電源。 出現 OFSET</p> <p>3. Release  key, display the pedal sensor value that stored in EEPROM.</p> <p>3 放開  鍵，會出現儲存於 EEPROM 中速度基座的讀值；</p>		

4. Once press  key, read the pedal sensor again. If the value between 1340~1790, press is  key to store.

4. 每按一次  鍵則會重新讀取一次速度基座, 當出現的值介於 1340~1790, 則按下  鍵儲存.


5. If always display "ERROR" that means the pedal sensor neutral point offset too much. The pedal sensor mechanical neutral point must be adjusted then repeat step 4.


5. 若一直出現 ERROR 表示速度基座中立點的機構位置偏離太多, 必須先調整速度基座中立點的機構位置, 再重復上述步驟 4 的動作.

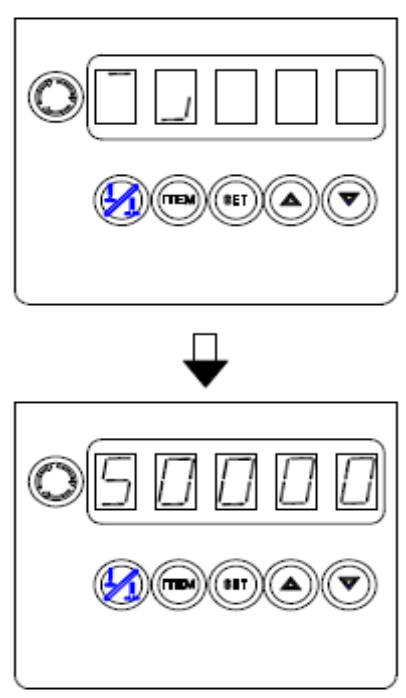
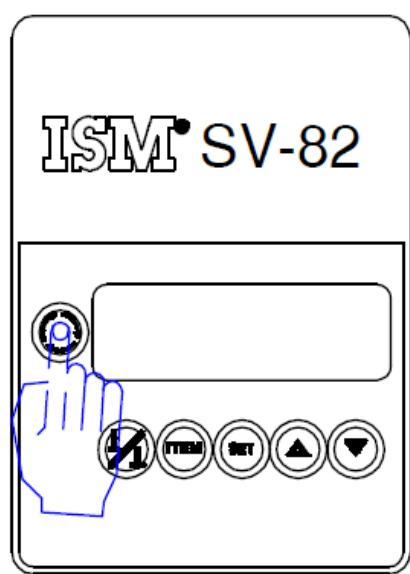


5. Switch the function screen


功能畫面切換:

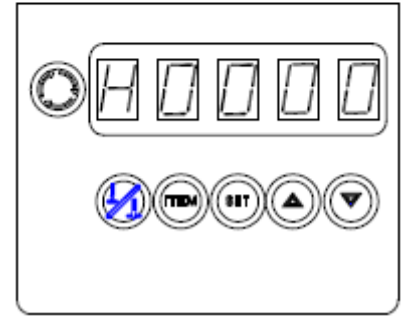
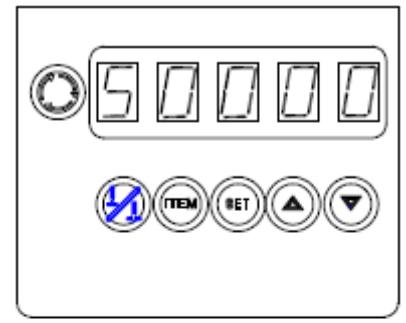
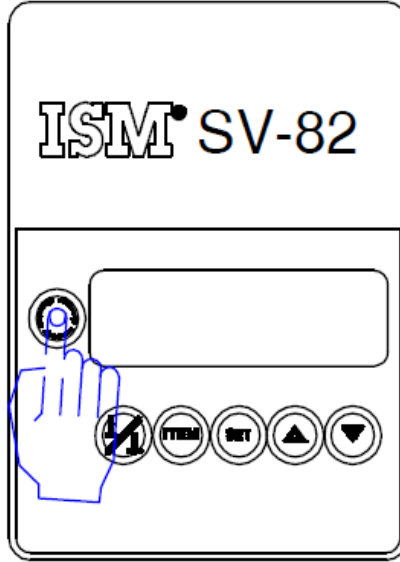
1. In normal operation mode, press  key, display the sewing machine speed.

1. 在平常工作模式, 按下  鍵, 畫面出現 S0000 顯示針車轉速畫面。





2. 在平常工作模式，當畫面顯示功


能選擇時，按下  鍵，
畫面出現 H**** 顯示單件計
針畫面，計件值加一時會自動
歸零。




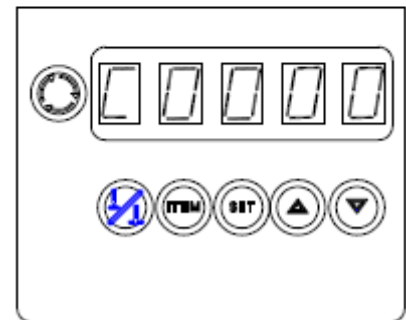
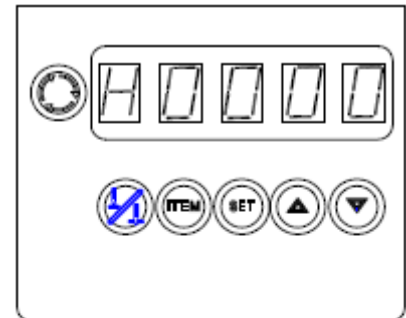
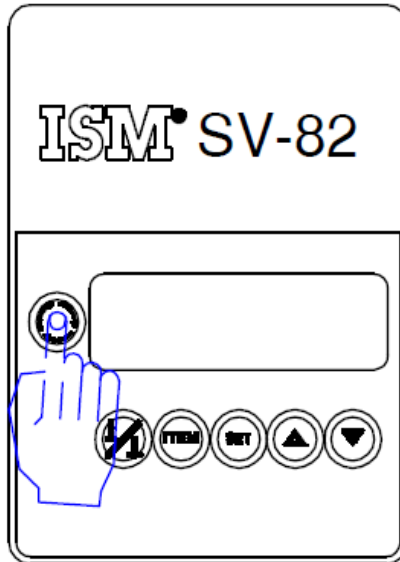
3. 在平常工作模式，當畫面顯示畫

面顯示單件時，按下  鍵，
畫面出現 C**** 顯示計件值。


按  鍵 → 計件值增加 1


按  鍵 → 計件值減少 1

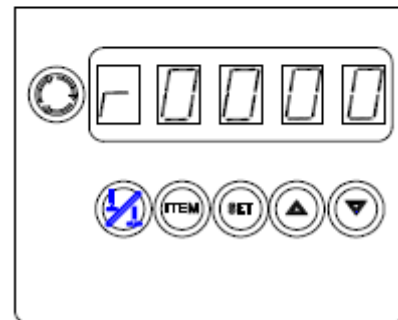
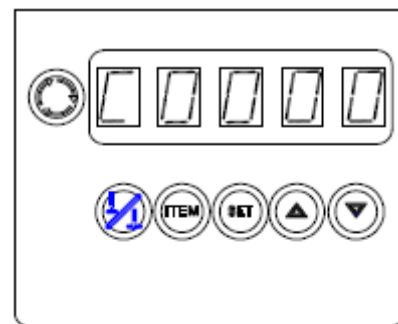
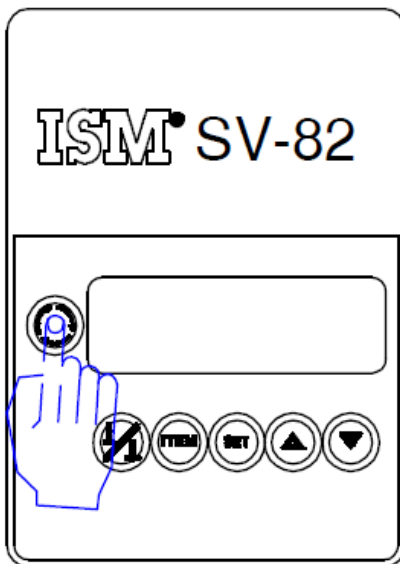
按  鍵 2 秒 → 計件值歸零



4. 在平常工作模式，當畫面顯示

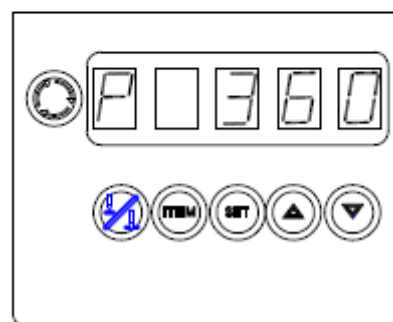
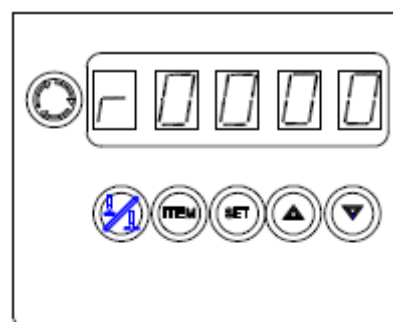
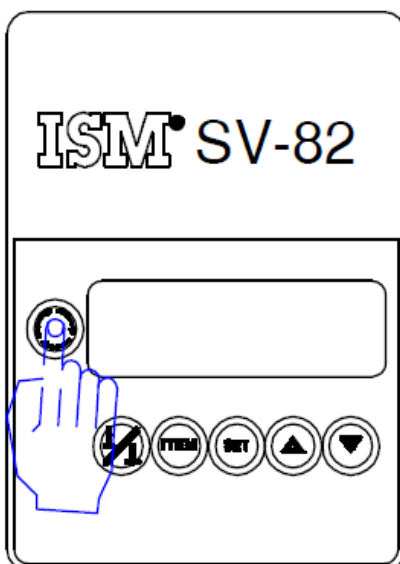
計件值時，按下  鍵，畫面出現 r****顯示馬達運轉時間畫面。

按  鍵 2 秒，馬達運轉時間歸零。



5.在平常工作模式，畫面顯示馬達

運轉時間，按下  鍵，畫面出現 P*** 顯示皮帶輪比值畫面。



IV Parameter list 參數表

No 號碼	Description 內容	Range 範圍
1	Sewing machine maximum speed 針車最高速度	200spm ~ 8000spm
2	Sewing machine medium speed 針車中速	200spm ~ 8000spm

3	Sewing machine positioning speed 針車定位速度	100spm ~ 250spm
4	Sewing machine trimming speed 針車切線速度	100spm ~ 250spm
5	No setting 未使用	
6	Soft start speed 慢速啟動速度	250spm ~ 2000spm
7	Soft start stitches 慢速啟動針數	0 ~ 19 stitches
8	Condensed sewing speed 密縫速度	500 ~ 2500spm
9	End condensed stitches' number 結束密縫針數	0 ~ 99 stitches
10	Stitches' number that between condensed sewing and trimming 密縫結束後切線執行前車縫針數	0 ~ 19 stitches
11	No setting 未使用	
12	Foot lifter control mode 壓腳控制模式	PFL: Pedal controls foot lifter. 踏板控制壓腳 TAFI: auto foot lifts after trimming 切完線後自動抬壓腳 AFL: Auto foot lifting after positioning 馬達定位停自動壓腳 TFL: Pedal controls foot lifter after trimming 切完線後才可以踏板控制抬壓腳 SFL: Auto foot lifting (Material edge sensor as output control) 自動壓腳(布端檢出器控制輸出) AFL2: Auto foot lifting after trimming. (It's effective even pedal forward) 切完線後自動抬壓腳(踏板保持前踩狀態時仍有效)
13	Delay time after foot lifter is down 壓腳放下後延遲時間	100 ~ 2500 ms
14	Confirming time for foot lifter acting level 壓腳動作準位確認時間	10 ~ 1000 ms
15~16	No setting 未使用	
17	Thread trimming mode 切線模式	OFF : No thread trimming 無切線 LOCK : lockstitch thread trimming 平車切線 UT : Needle up trimming 上停切線 (上切刀) AIR: Needle up trimming (AIR BLOW) 上停切線 (吹氣式) UT2: Needle down trimming (trimming & wiping together) 上停切線(切線與撥線一起動作)
18	Thread trimming delaying time 切線延遲時間	0 ~ 200 ms
19	Thread trimming acting time 切線動作時間	0 ~ 1000 ms
20	Thread wiping delaying time 撥線延遲時間	0 ~ 300 ms
21	Thread wiping acting time 撥線動作時間	0 ~ 2500 ms
22	Foot lifter delaying time 壓腳延遲時間	0 ~ 2500 ms

23	Thread wiping output control 撥線輸出控制	0 : No output thread wiping 不輸出撥線 1 : Output thread wiping 輸出撥線 2 : Output thread wiping when foot lifter active 輸出撥線,切完線後與壓腳同動
24	Motor rotating direction 馬達轉向	CCW : Counterclockwise 逆時針 CW : Clockwise 順時針
25	Needle position mode 定位器型式	OFF: Motor Z signal 馬達 Z 信號 ON: For external synchronizer 外掛式同步器
26~27	No setting 未使用	
28	The curve slope of pedal stroke vs. motor rotating speed 踏板行程對應馬達速度曲線	0 ~ 4 Bigger value means smaller slope 數值越大曲線斜率越小
29	Motor type select 馬達型式選擇	6535 : 650 W / 3500 rpm 5535 : 550 W / 3500 rpm 5560 : 550 W / 6000 rpm 5550 : 550 W / 5000 rpm 6560 : 650 W / 6000 rpm 4550 : 450 W / 5000 rpm 5070 : 500 W / 7000 rpm 3570 : 350 W / 7000 rpm 啓動電流大小順序： 3570 < 5070 < 4550 < 6560 < 5550 < 5560 < 5535 < 6535
30	The pedal stroke adjustment for motor start rotating 馬達開始轉動的踏板行程調整	50 ~ 90 (Pedal neutral = 40, LD1 lighting) (中立點參考值 = 40, LD1 點亮)
31	Pedal stroke adjusts for motor start accelerating 馬達開始加速的踏板行程調整	70 ~ 110
32	Pedal stroke adjusts for foot lifter start acting 壓腳開始動作的踏板行程調整	10 ~ 35
33	Pedal stroke adjusts for start thread trimming 切線開始動作的踏板行程調整	3 ~ 30
34	Standing type pedal operating choice 立式作業選擇	OFF : Normal speed pedal unit 速度基座正常操作 PK70 : For JUKI standing operation PK70 type 配合 JUKI 立式作業 PK70 PKSW : Standing pedal operation, the speed is fixed (low speed & high speed) 立式作業,速度固定(低速&高速) PK71 : For YHH standing operation PK71 type 配合永輝興立式作業 PK71
35	Safety switch type 安全開關型式	N.O : Normal open switch 常開接點 N.C : Normal close switch 常閉接點
36	In auto test mode, motor running time adjustment 自動測試模式下,馬達運轉時間調整	1 ~ 20 second
37	In auto test mode, motor stopping time adjustment 自動測試模式下,馬達停止時間調整	1 ~ 20 second

38	Back tacking switch function 回針按鍵功能	BTSW : Control back tacking solenoid 控制回針線圈 NDUP : Control back tacking solenoid when motor runs, and as needle up switch when motor stops 運轉中控制回針,靜止時提針至上停 DSIN : Control back tacking solenoid when motor runs, non-continuously inching during motor stops 運轉中控制回針線圈,靜止時不連續補針 CNIN : Control back tacking solenoid when motor runs, continuously inching during motor stops 運轉中控制回針線圈,靜止時連續補針 RFSS : Reverse feed stitching function is effective both during sewing and stopping 途中倒縫(車縫中&停止時均有效) UPBT : Control back tacking solenoid only in up position 控制回針線圈只在上停點有效 SHOT : Control back tacking solenoid, No.74 decide the output pulse width. 控制回針輸出脈波寬由 NO.74 決定 FLIP : Control back tacking solenoid, by flip-flop type output 以 flip-flop 方式控制回針線圈
39	Stitches' number in reverse feed stitching 途中倒縫針數	0 ~ 19 stitches
40	Trimming function in the reverse feed stitching 途中倒縫切線功能	OFF: Ineffective 無功能 ON: Effective 有此功能
41	Execute auto thread trimming after end fixed stitches' number sewing process 定寸縫工程結束後,自動切線功能	OFF: Ineffective 無功能 ON: Effective 有此功能
42	Material edge sensor function 布端檢出器功能	OFF: Ineffective 無功能 ON: Effective 有此功能
43	Material edge sensor stitches' number 布端檢出器針數	0 ~ 99 stitches 針
44	Use material edge sensor to process trimming function 利用布端檢出器進行切線功能	OFF: Ineffective 無功能 ON: Effective 有此功能
45	Auto needle up positioning when power on 開機自動上停	OFF: Ineffective 無功能 ON: Effective 有此功能
46	Backtack switch protect time 回針按鍵保護時間	0 ~ 30 seconds
47	To lock the pedal forward function before finish trimming process 切線完成前踏板前踩互鎖功能	OFF: Ineffective 無功能 ON: Effective 有此功能
48	Sewing machine reversed revolution function after thread trimming processed 切線完成後車頭反轉功能	OFF: Ineffective 無功能 ON: Effective 有此功能
49	Sewing machine reversed revolution angles after thread trimming processed 切線完成後車頭反轉角度	0 ~ 250°
50	The delaying time after finished thread trimming but before sewing machine reversed revolution. 切線完成後車頭反轉前延遲時間	0 ~ 2500 ms
51	Virtual needle down positioning function 虛擬下停功能	OFF: Ineffective 無功能 ON: Effective 有此功能
52	The angles between virtual needle down positioning point and needle up signal 虛擬下停點,由上停信號開始點起算	0 ~ 250°

53	The needle positioning function of starting sewing 起縫定針功能	OFF: Ineffective ON: Effective	無功能 有此功能
54	The needle positioning angles of starting sewing 起縫定針角度	0 ~ 250°	
55	The starting angle of trimming action (count from the needle down position and only effective in LU trimming mode) 切線動作開始角度(下停開始起算,只在 LU 切線模式有效)	0 ~ 250°	
56	The continuous angles of trimming action (count from the needle down position and only effective in LU trimming mode) 切線動作持續角度(只在 LU 切線模式有效)	0 ~ 250°	
57	The tension release starts acting angles (count from the needle down position and only effective in LU trimming mode) 紗拉組開始動作角度(下停開始起算,只在 LU 切線模式有效)	0 ~ 250°	
58	The tension release continuous acting angles (only effective in LU trimming mode) 紗拉組動作持續角度(只在 LU 切線模式有效)	0 ~ 250°	
59	The tension release continuous acting time (count from the needle up position and only effective in LU trimming mode) 紗拉組動作持續時間(上停信號開始動作起算,只在 LU 切線模式有效)	0 ~ 1250 ms	
60~64	No setting 未使用		
65	Option for edge sensor 1 布端檢出器 1 型式選擇	OFF: light on type ON: dark of type	
66	Edge sensor 1 controlling foot lifter 布端檢出器 1 控制壓腳動作	OFF: Ineffective ON: Effective	無功能 有此功能
67~68	No setting 未使用		
69	The Option OUT_C acts stitches' number after material edge sensor on (B747&MO&MO3 are effective) 布端檢出器開始動作 Option OUT_C 動作針數(B747&MO&MO3 車頭有效)	0 ~ 99 stitches	
70	The Option OUT_C delays stitches' number after material edge sensor off (B747&MO&MO3 are effective) 布端檢出器結束動作 Option OUT_C 延遲針數(B747&MO&MO3 車頭有效)	0 ~ 99 stitches	
71	The acts stitches' number after the Option OUT_C delays stitches' number & material edge sensor off (B747&MO&MO3 are effective) 布端檢出器結束動作 Option OUT_C 延遲後動作針數(B747&MO&MO3 車頭有效)	0 ~ 99 stitches	
72	The Option OUT_A acts stitches' number after material edge sensor on 布端檢出器開始動作 Option OUT_A 延遲針數	0 ~ 99 stitches	
73	The Option OUT_A delays stitches' number after material edge sensor off 布端檢出器結束動作 Option OUT_A 延遲針數	0 ~ 99 stitches	
74	The Option OUT_A acts time Option OUT_A 動作時間	0 ~ 250 ms	
75	The Option OUT_D acts stitches' number after material edge sensor on (MO&MO3 are effective) 布端檢出器開始動作 Option OUT_D 動作針數(MO&MO3 車頭有效)	0 ~ 99 stitches	
76	The Option OUT_D delays stitches' number after material edge sensor off (MO&MO3 are effective) 布端檢出器結束動作 Option OUT_D 動作針數(MO&MO3 車頭有效)	0 ~ 99 stitches	

77	The Option OUT_C acts stitches' number after material edge sensor on (ATCS&P664 are effective) 布端檢出器開始動作 Option OUT_C 延遲動作針數 (ATCS&P664 車頭有效)	0 ~ 99 stitches
78	The Option OUT_C delays stitches' number after material edge sensor off (ATCS&P664 are effective) 布端檢出器結束動作 Option OUT_C 持續動作針數 (ATCS&P664 車頭有效)	0 ~ 99 stitches
79	The function choice of Option OUT_C (B747&MO&MO3 are effective) Option OUT_C 功能選擇 (B747&MO&MO3 車頭有效)	0 : No output 無輸出 1 : Depend on the setting stitches' number output 根據所設定針數輸出 2 : Depend on the setting stitches' number output when foot lifter acts 根據所設定針數輸出 & 舉壓腳動作時輸出 3: No output when motor stop 馬達停止時無輸出
80	The function choice of Option OUT_A Option OUT_A 功能選擇	0 : No output 無輸出 1 : Depend on the setting stitches' number output (Pedal control speed) 根據所設定針數輸出(踏板控制速度) 2: Depend on the setting stitches number output(start of material edge sensor & end of action when motor in medium speed) 根據所設定針數輸出(布端檢出器開始&結束動作時馬達為中速) 3: Depend on the setting stitches' number output(end of material edge sensor motor at medium speed) 根據所設定針數輸出(布端檢出氣結束動作時馬達為中速)
81	The function choice of Option OUT_D Option OUT_D 功能選擇	0 : No output 無輸出 1 : Depend on the setting stitches' number output (Pedal control speed) 根據所設定針數輸出(踏板控制速度) 2 : Depend on the setting stitches' number output (material edge sensor ends & during motor medium speed) 根據所設定針數輸出(布端檢出器結束動作時馬達為中速) 3 : Auto sewing the setting stitches without pedal press 踏板不需要前踩也可以自動執行所設定的針數
82	The function choice of Option OUT_C (ATCS&P664 are effective) OUT_C 功能選擇 (ATCS&P664 車頭有效)	0 : No output 無輸出 1 : Depend on the setting stitches' number output 根據所設定針數輸出 2 : Depend on the setting stitches' number output when foot lifter acts 根據所設定針數輸出 & 舉壓腳動作時輸出 3 : Depend on the setting stitches' number output (keeps acting even motor stops) 根據所設定針數輸出(馬達停止時仍保持動作)
83	The control solenoid output cycle choice of material edge sensor 布端檢出器控制線圈輸出週期結束選擇	0 : Option OUT_C 1 : Option OUT_A 2 : Option OUT_D 3 : None

84	The priority between material edge sensor on & pressing pedal forward 布端檢出器開始動作與踏板前踩優先權選擇	0 : The material edge sensor must be acted before pressing pedal 布端檢出器須在踏板前踩之前動作 1 : Pedal condition is immediate effective when material edge sensor on 布端檢出器開始動作時踏板的狀態立刻有效 2 : Pressing pedal is prior. 踏板前踩優先
85	Cancel the thread trimming function choice when pedal is heeled. 取消踏板後踩切線功能選擇	OFF : With the thread trimming function when pedal is heeled 有踏板後踩切線功能 ON : Cancel the thread trimming function when pedal is heeled. And just the foot lifting function is effective. 取消踏板後踩切線功能只做舉壓腳動作
86	Special function choice 特殊功能選擇	0 : No special function 沒有特殊功能 4 : LU1521 function LU1521 功能 6 : SAS1 function SAS1 功能 7 : BASF function BAFS 功能 10 : edge sensor with re-cycle function 布端檢出器有再次循環功能 11: auto sewing when use PKS PKSW 控制自動車縫功能
87	No synchronizer operation mode 沒有同步器操作模式	OFF : ineffective . 無功能 ON : effective 有此功能 (不會顯示 ER-1)
88	The speed margin of executing needle positioning 執行定位的速度臨界值	80 ~ 160
89	Decelerating speed slope choice 減速曲線選擇	1 ~ 8 (The bigger value means the longer time of decelerating.) 設定值越大,減速時間越長
90	Motor static brake function 馬達靜止煞車功能	0 : No such function 無功能 1~20 : (The bigger value means the more powerful braking force.) 1 ~ 20 : 有此功能, 設定值越大煞車力量越大
91	Motor rotation signal control 馬達轉動信號控制	OFF : No output 不輸出 TL1 : TL solenoid outputs when motor rotates. 馬達轉動時由 TL 線圈輸出 TL2 : TL solenoid outputs when motor rotates & foot lifter acts. 馬達轉動時和舉壓腳動作時由 TL 線圈輸出
92	Forward output the motor rotation signal 馬達轉動信號提早輸出時間	0 ~ 1250 ms
93	Current limit table boost up 提升起動電流限制值	0 ~ 20
94	Reverse angles when machine starts stitching. 起縫反轉角度	0 ~ 250°
95	Check the speed control unit condition function when power on. 開機時檢查速度基座狀態功能	OFF: Ineffective 無功能 ON: Effective 有此功能
96	Alarm signal output function. 發生 alarm 時有訊號輸出功能	OFF: Ineffective 無功能 ON: Effective 有此功能
97~101	No setting 未使用	

102	Material edge sensor begins acting, Option OUT_B delay acting stitches number 布端檢出器開始動作，Option OUT_B 延遲動作針數	0 ~ 99 stitches
103	Material edge sensor ends acting, Option OUT_B continuously act stitches number 布端檢出器結束動作，Option OUT_B 持續動作針數	0 ~ 99 stitches
104	Option OUT_B function choice Option OUT_B 功能選擇	OFF : No output 無輸出 ON : Depend on setting stitches' number output 根據所設定針數輸出
105	Foot lifter protecting time 押腳保護時間	0 ~ 60 seconds
106~107	No setting 未使用	
108	Motor's braking force when positioning 馬達定位時煞車力	0 ~ 5
109	Quick Needle positioning function 快速定位停	OFF: Ineffective 無功能 ON: Effective 有此功能
110	Motor positioning stopping force 馬達定位時煞車力(速度參數)	0 ~ 5
111	ER-2 checking time ER-2 檢查時間	0 ~ 5 seconds 秒
112	ATC auto function setting (Only effective in ATC machine) ATC 自動機能設定(只在 ATC 車頭選項中有效)	OFF: Ineffective 無功能 ON: Effective 有此功能
113	Material edge sensor begins acting, Option OUT_B delay acting stitches' number 布端檢出器開始動作 Option OUT_B 延遲動作針數	0 ~ 99 stitches
114	Material edge sensor ends acting, Option OUT_B continuously act stitches' number 布端檢出器結束動作 Option OUT_B 持續動作針數	0 ~ 99 stitches
115	Option OUT_B function choice Option OUT_B 功能選擇	OFF : No output 無輸出 ON: Depend on setting stitches' number output 根據所設定針數輸出
116	Control Option OUT_B solenoid output function by Option IN_C 利用 Option IN_C 控制 Option OUT_B 線圈輸出功能	OFF: Ineffective 無功能 ON: Effective 有此功能
117	Start condensed stitching stitches' number 開始密縫針數	0 ~ 99 stitches
118	Slight breaking action select 微小煞車動作選擇	OFF: Ineffective 無功能 ON: Effective 有此功能
119	ER-3 checking time ER-3 檢查時間	0 ~ 20
120	Breaking time 煞車臨界值	130 ~ 250
121	Slight breaking action time 微小煞車動作時間	10 ~ 50ms
122	Slight breaking speed 微小煞車動作臨界速度	200 ~ 1700rpm
123	Front suction time 前吸風時間	0 ~ 5000ms
124	Interval suction time 間接吸風時間	0 ~ 5000ms
125	Rear suction time 後吸風時間	0 ~ 5000ms

126	Suction mode 吸風模式	OFF: Control by stitches 針數控制 ON: Control by timing 時間控制
127	No setting 未使用	0
128	Option for special function 特殊功能選擇	OFF : ineffective 無功能 1: If footlifter switch has been activated once, it will automatically change for TFL mode it is switched off 只要壓腳開關動作過一次,就強制將壓腳控制模式改為 TFL,直到關機 2: Delay time for option OUT_C to OFF the function Option OUT_C 延遲 OFF 功能 3: After edge sensor is over, stitches can divide in four sections 布端結束後的針數可分為 4 段 4: Last startback setting change 前倒縫最後一趟修正模式 5: Dino special function DINO 特殊顯示功能 6: After thread suction, material edge sensor is ON (Only for MO3 model) 吸線裝置動作完成後,布端檢出器自動有效(只在 MO3 機型有效)
129	Differential control function 微分控制功能	OFF: Ineffective 無功能 ON: Effective 有此功能
130	Up position adjustment 上停點位置調整	- 50 ° ~ 50 °
131	Stitch number for one-shot function ONE-SHOT 針數	0 ~ 250
132~133	No setting 未使用	
134	Stop position when material edge sensor active 布端檢出器動作時,馬達停止位置	OFF : Depend on simple control panel setting 由簡易面板上下停決定 UP : Up position 上停點 DOWN : Down position 下停點
135~136	No setting 未使用	
137	Delay time between UTL and condensing stitch UTL 動作輸出後到執行密縫前延遲時間	0 ~ 200 ms
138	Option OUT_A delay acting stitches (only effective in PT2 machine) 布端檢出器開始動作 Option OUT_A 延遲動作針數(只在 PT2 機型有效)	0 ~ 99 stitches
139	Option OUT_A acting stitches (only effective in PT2 machine) 布端檢出器動作 Option OUT_A 持續動作針數(只在 PT2 機型有效)	0 ~ 99 stitches
140	Motor protecting function 馬達運轉時間保護功能	OFF: Ineffective 無功能 ON: Effective 有此功能
141	Cumulate times for motor protecting function 馬達發生保護功能時間	100 ~ 5000 hours
142	Material edge sensor1 detection status 布端檢出器 1 檢出判斷基準	OFF: Timing 時間 ON: Stitches 針數
143	Material edge sensor1 detects stitches 布端檢出器 1 檢出針數	0-20 stitches

144	In auto test mode, motor running level adjustment 自動測試模式下,馬達運轉速度準位調整	60 ~ 250	
145	In auto test mode, motor stop mode selection 自動測試模式下,馬達停止模式選擇	TRIM : trimming active 切線動作 FLON : foot lifter active 舉押腳動作 STOP : motor stop 馬達停止	
146	Material edge sensor2 detection status 布端檢出器 2 檢出判斷基準	OFF: Timing 時間 ON: Stitches 針數	
147	Material edge sensor2 detects stitches 布端檢出器 2 檢出針數	0-20 stitches	
148	Quick needle positioning check level 快速定位停檢查準位	500 ~ 1000 spm	
149	Option for material edge sensor 2 布端檢出器 2 型式選擇	OFF: light on type ON: dark on type	
150	Motor automatic stop function 馬達自動停止功能	OFF: Ineffective ON: Effective	無功能 有此功能
151	Times for automatic stop the motor 馬達執行自動停止時間	0 ~ 100 hours	
152	Speed loop gain adjustment 速度迴路增益調整	0 ~ 12	
153	Virtual needle up positioning function (only for direct drive motor) 虛擬上停功能(直驅馬達適用)	OFF: Ineffective ON: Effective	無功能 有此功能
154	Fixed sewing speed decrease curve option 定寸縫減速曲線選擇	0 ~ 4	
155	The safety range of UP position 上停定位的安全範圍	0 ~ 100	
156-158	No setting 未使用		
159	Second stage for material edge sensor's no. of stitches 第二段布端檢出器針數	0 ~ 250 stitches	
160	Third stage for material edge sensor's no. of stitches 第三段布端檢出器針數	0 ~ 250 stitches	
161	Fourth stage for material edge sensor's no. of stitches 第四段布端檢出器針數	0 ~ 250 stitches	
162	Execute auto foot lifter after end fixed stitches' number sewing process 固定針數縫製工程結束後,自動壓腳功能	OFF: Ineffective ON: Effective	無功能 有此功能
163	Quick trimming function 快速切刀功能	OFF: Ineffective ON: Effective	無功能 有此功能
164	No setting 未使用		
165	Delay OFF time for option OUT_C Option OUT_C 延遲 OFF 時間	0 ~ 9000 ms	
166	Prevent special parameter be modified (NO.1 & 2 & 17 & 24) 參數鎖定功能	OFF: Ineffective ON: Effective	無功能 有此功能
167	Angle for quick positioning 快速定位停提前減速角度	0 ~ 200 °	
168	No. of interval stitches for middle suction 中途吸風間格針數	0 ~ 250 stitches	
169	No. of stitches at medium speed 中途吸風動作針數	0 ~ 250 stitches	
170	Before footlifter is activated, motor will rotate to the upper position 舉壓腳動作前馬達先轉到上停位置	OFF: Ineffective ON: Effective	無功能 有此功能

171	When switch for manual cutter is activated, the time it takes for thread suction 手動斬刀開關動作時吸線裝置動作時間	0 ~ 9900 ms	
172	Manual blower function 手動吹風功能	OFF: Ineffective ON: Effective	無功能 有此功能
173	Blower start active angle 吹風開始角度	0 ~ 250°	
174	Blower stop active angle 吹風結束角度	100 ~ 250°	
175	Blower start active angle 吹風動作針數	0 ~ 19 stitches	
176	Tension release delay time when blower active 吹風動作時紗拉組延遲時間	0 ~ 100 ms	
177	Tension release active time when blower active 吹風動作時紗拉組動作時間	0 ~ 150 ms	
178	Manual motor pulley ratio measure 手動皮帶輪比量測	OFF: not execute ON: executed	未執行 已執行
179	Exciting power (in motor adjustment mode) 激磁力 (馬達調整模式下)	0 ~ 8	
180	Accelerating command adjustment 加速指令調整	0 ~ 16	
181	Cutter mode for sensor off(only effective in P8TK) 電眼檢出時斬刀模式選擇(只有 P8TK 模式有效)	0 : Cutter active immediately 1: After NO.73 setting stitches, cutter active 經過 NO73 設定針數後，斬刀動作	斬刀立即動作
182	Motor control mode after cutter action (only effective in P8TK) 斬刀動作完成後，馬達控制模式(只有 P8TK 模式有效)	OFF : Pedal must turn back to the neural position ON : Pedal can control motor immediately	踏板必須先回歸到中立點 可以直接控制馬達
183	Air blow stitches (only effective in P9TK、PYTK、P8TK) 斬刀動作完成後吹氣針數(只有 PYTK 模式有效)	0 ~ 200	
184	Fixed stitches' number sewing process stitches (only effective in PYTK) 定寸縫工程針數(只有 PYTK 模式有效)	0 ~ 200	
185	Execute fixed stitches' number sewing process at the beginning (only effective in PYTK) 執行定寸縫工程(只有 PYTK 模式有效)	OFF: Ineffective ON: Effective	無功能 有此功能
186	Automatic control by edge sensor 布端檢出器控制自動模式	OFF : No such function. ON : With the function	無功能 有此功能
187	Edge sensor to act time for trigger automatic control 自動模式啟動時間(布端檢出器檢入開始計數)	1 ~ 20 second	
188	Forward stitches for blower action before start cutter (only effective in P9TK、PYTK、P8TK) 在前斬刀動作前吹氣提前動作針數 (只有 P9TK、PYTK、P8TK 模式有效)	0 ~ 200	
189	Forward stitches for blower action before end cutter (only effective in P9TK、PYTK、P8TK) 在後斬刀動作前吹氣提前動作針數 (只有 P9TK、PYTK、P8TK 模式有效)	0 ~ 200	
190	Forward stitches for clamp active before end cutter (only effective in P9TK) 後斬刀動作之前，夾布裝置提前動作針數 (只有 P9TK 模式有效)	0 ~ 50	
191	Delay time for thrower active after clamp action (only effective in P9TK) 推布裝置動作延遲時間，在夾布裝置動作後 (只有 P9TK 模式有效)	0 ~ 250 ms	
192	Delay time for thrower inactive after limit switch action (only effective in P9TK) 極限開關動作後延遲時間將推布裝置關閉(只有 P9TK 模式有效)	0 ~ 250 ms	

