

## 5. Memory switches

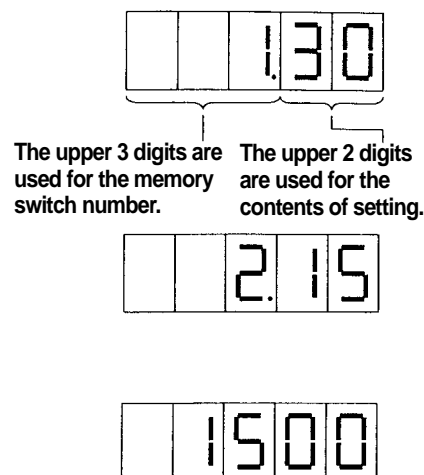
The sewing machine operation can be changed by changing the setting of the memory switch.

### (1) Memory switch start and change

1. When the **M** key is pressed in the state that the sewing LED is turn off, the user level setting mode is assumed for the memory switches. When the **M** key is continuously pressed for 6 seconds, the service level setting mode is assumed for the memory switches.

**(Caution)** In the case of continued pressing, the buzzer sounds after 3 seconds and 6 seconds, respectively. The buzzer sound after 3 seconds indicates that the test mode has become effective.

2. The memory switch number can be modified with the **+/-** and **-/-** keys.
3. Select a required number of memory switch by pressing the **+/-** **-/-** key, then fix the number by pressing **OK** key to turn on the LED.
4. Change the contents of the memory switch with the **+/-** and **-/-** keys.
5. The factory shipment values can be recovered with the **Reset** key.
6. The contents of modification can be registered by pressing the **OK** key. In this case, the sewing LED is turn off and the select condition of the memory switch number is recovered.
7. When the **M** key is pressed, the memory switch setting mode is finished and normal operating conditions are recovered.



## (2) Table of memory switch functions

Some initial values for shipment may change according to models.

The contents are divided into two categories of user level (U) and service level (S).

| Indication | Level | Functions  | Setting range  | State when delivered | Remarks  |
|------------|-------|--|--|----------------------|--|
| □□130      | U     | Max sewing speed<br>(Setting possible in the unit of 100rpm)   | 400~3000rpm  | 3000                 | To be set at 2700 for the LK-1900AW and LK-1903A.  |
| □□215      | U     | Sewing speed for the first stitch<br>(with needle thread clamp)<br>(Setting possible in the unit of 100rpm)        | 400~1500rpm  | 1500                 |  |
| □□330      | U     | Sewing speed for the second stitch<br>(with needle thread clamp)<br>(Setting possible in the unit of 100rpm)       | 400~3000rpm  | 3000                 |  |
| □□430      | U     | Sewing speed for the third stitch<br>(with needle thread clamp)<br>(Setting possible in the unit of 100rpm)        | 400~3000rpm  | 3000                 |  |
| □□530      | U     | Sewing speed for the 4th stitch<br>(with needle thread clamp)<br>(Setting possible in the unit of 100rpm)          | 400~3000rpm  | 3000                 |  |
| □□630      | U     | Sewing speed for the 5th stitch<br>(with needle thread clamp)<br>(Setting possible in the unit of 100rpm)          | 400~3000rpm  | 3000                 |  |
| □□7--      | U     | Thread tension for the first stitch<br>(with needle thread clamp)  | 0~200  | 200                  |  |
| □□8--      | U     | Thread tension at the time of<br>thread trimming   | 0~200  | 0                    |  |
| □□9--      | U     | Changeover timing of thread tension<br>at the time of thread trimming  | -6~4<br>(~-1:32°, 0:28°, 1:24°~)   | 0                    | When the setting value is increased, operation becomes faster in the unit of 4°.   |
| □□10 4     | U     | Sewing speed for the first stitch<br>(with needle thread clamp)<br>(Setting possible in the unit of 100rpm)        | 400~1500rpm  | 400                  |  |
| □□11 9     | U     | Sewing speed for the second stitch<br>(with needle thread clamp)<br>(Setting possible in the unit of 100rpm)       | 400~3000rpm  | 900                  |  |
| □□12 30    | U     | Sewing speed for the third stitch<br>(with needle thread clamp)<br>(Setting possible in the unit of 100rpm)        | 400~3000rpm  | 3000                 |  |
| □□13 30    | U     | Sewing speed for the 4th stitch<br>(with needle thread clamp)<br>(Setting possible in the unit of 100rpm)          | 400~3000rpm  | 3000                 |  |
| □□14 30    | U     | Sewing speed for the 5th stitch<br>(with needle thread clamp)<br>(Setting possible in the unit of 100rpm)          | 400~3000rpm  | 3000                 |  |
| □□15 --    | U     | Thread tension for the first stitch<br>(with needle thread clamp)  | 0~200  | 0                    |  |
| □□16 --    | U     | Changeover timing of thread tension<br>at the sewing start<br>(with needle thread clamp)                           | -5~2<br>(~-1: 64°, 0: 60°, 1: 56°~)  | 0                    | When the setting value is increased, operation becomes faster in the unit of 4°.   |
| □□17 0     | U     | Display of Pattern No., XY enlargement/<br>reduction scale rate, and max.<br>speed limits; change enabled/disabled | 0: Operative<br>1: Inoperative   | 0                    | In case of setting 1, use of M key is prohibited as well. When changing memory switch, pressing M key, turn ON the power switch.<br>(Standard operation panel) |
| □□18 0     | U     | Counter operation  | 0: Production counter (addition)<br>1: Bobbin thread counter<br>(subtraction)  | 0                    | (Standard operation panel)   |
| □□19 0     | U     | Selection of pedal   | 0: Standard pedal<br>1: Standard pedal<br>(2-step stroke)<br>2: Optional pedal<br>3: Optional pedal<br>(2-step stroke) | 0                    |  |
| □□20 0     | U     | Selection of pedal   | 0: Standard pedal<br>1: Optional pedal   | 0                    |  |

| Indication | Level | Functions  | Setting range  | State when delivered | Remarks   |
|------------|-------|--|--|----------------------|---|
|            | S     | Standard pedal, clamp switch position  | 50~200   | 70                   | When the setting value is increased, the amount of pedal tread becomes larger.  |
|            | S     | Standard pedal, 2-step stroke switch position  | 50~200   | 120                  | When the setting value is increased, the amount of pedal tread becomes larger.  |
|            | S     | Standard pedal, start switch position  | 50~200   | 185                  | When the setting value is increased, the amount of pedal tread becomes larger.  |
|            | U     | Optional pedal 1 operated  | 0: OFF when trodden again<br>1: OFF when released  | 0                    |   |
|            | U     | Optional pedal 2 operated  | 0: OFF when trodden again<br>1: OFF when released  | 0                    |   |
|            | U     | Height of work clamp foot at the time of 2-step stroke   | 50~90  | 70                   | Height is lowered when the set value is increased.  |
|            | S     | Clamp lowering speed during pedal operation (Setting possible in the unit of 10pps)                      | 100~4000pps  | 4000                 |   |
|            | S     | Clamp rising speed during pedal operation (Setting possible in the unit of 10pps)                        | 100~4000pps  | 1500                 | Too much rise in the setting level may result in malfunction.   |
|            | S     | Thread trimmer clamp rising speed at the end of sewing (Setting possible in the unit of 10pps)           | 100~4000pps  | 3000                 | Too much rise in the setting level may result in malfunction.   |
|            | U     | Pattern's enlargement / reduction reference point  | 0: Origin<br>1: Sewing start point   | 0                    | The enlargement / reduction point in the pattern data is effective only for 0 setting.  |
|            | U     | It is possible to stop sewing machine operation with panel's reset key.                                  | 0: Disabled<br>1: Panel's reset key<br>2: External switch  | 0                    |   |
|            | U     | Buzzer sound can be prohibited.  | 0: No buzzer sound<br>1: Panel's operation sound<br>2: Panel's operation sound + Error sound   | 2                    |   |
|            | U     | No. of stitches for needle thread clamp release  | 1 ~ 7 stitches   | 2                    |   |
|            | U     | Clamping timing of needle thread clamp   | -10~0<br>(-1:84°, 0:80°)   | 0                    | Delayed in negative direction in the unit of 4°.  |
|            | U     | Needle thread clamp control disabled   | 0: Normal<br>1: Disabled   | 0                    | Set at 1 for LK1903A.   |
|            | U     | Selection of feed operation timing. Set in negative direction when the tightness of stitches is adverse. | -8~16<br>(-11:64°, 12:60°, 13:56°~)  | 12                   | Delayed in negative direction in the unit of 4°. If set at extreme negative, there is danger of needle breakage. Significant when handling heavy materials. |
|            | U     | State of work clamp foot after completion of sewing can be selected                                      | 0: Work clamp foot goes up after moving at the sewing start.<br>1: Work clamp foot goes up immediately after the end of sewing<br>2: Work clamp foot goes up by pedal operation after moving at the sewing start.<br>LK1903A | 1                    | LK-1903A/BR-35 to be set at 0   |
|            | S     | Sewing is possible only with the start switch, without raising the work clamp foot.                      | 0: Normal<br>1: Work clamp foot rise disabled.   | 0                    |   |
|            | U     | Each time sewing is finished, origin retrieval is possible. (Except for the cycle sewing)                | 0: No origin retrieval<br>1: Origin retrieval enabled  | 0                    |   |
|            | U     | Origin retrieval setting is possible after cycle sewing.   | 0: No origin retrieval<br>1: Origin retrieval after the end of one pattern.<br>2: Origin retrieval after the end of one cycle.   | 0                    |   |

| Indication | Level | Functions  | Setting range  | State when delivered | Remarks   |
|------------|-------|--|--|----------------------|---|
| 41 0       | U     | State of work clamp foot when machine stopped by temporary stop command can be selected.                     | 0: Work clamp foot goes up.<br>1: Work clamp foot goes up with work clamp foot switch.<br>2: Lift of work clamp foot is prohibited.  | 0                    |   |
| 42 0       | U     | Needle bar stop position is set.   | 0: Up position (53°)<br>1: Upper dead point (22°)  | 0                    | Needle bar rotates the reverse direction after the UP position stop and stops when upper dead point stop is set.  |
| 43 1       | S     | Selection of sewing machine rpm during thread trimming   | 0:400rpm<br>1:800rpm   | 1                    | This is the sewing machine rpm of the thread spreading by moving knife. When the sewing machine has stopped, thread trimmer is function.                        |
| 44 1       | S     | Selection of whether the thread is moved in the direction of easy trimming.                                  | 0: Feeding disabled.<br>1: Feeding enabled.  | 1                    |   |
| 45 16      | S     | Needle hole guide diameter when feeding is moved for thread cutting. (Setting possible in the unit of 0.2mm) | 16~40<br>(1.6mm~4.0mm)   | 16<br>(1.6mm)        | When the setting value is increased, the amount of feeding becomes larger.  |
| 46 0       | U     | Thread trimming can be disabled at the end of sewing.  | 0: Normal<br>1: Thread trimming disabled   | 0                    | After tentative stoppage, thread trimming is not disabled.  |
| 47 0       | S     | Thread trimming can be disabled.   | 0: Normal<br>1: Thread trimming disabled   | 0                    | All thread trimming operation is disabled.  |
| 48 0       | U     | The origin reset route can be selected with the reset key.   | 0: Linear reset<br>1: Pattern returning  | 0                    |   |
| 49 16      | U     | Bobbin winding speed can be set (Setting possible in the unit of 100rpm)                                     | 800~2000rpm  | 1600                 |   |
| 50 2       | U     | Operation timing of material closing is selected. (LK1901A only)   | 0: Output prohibited<br>1: Operation when work clamp foot comes down.<br>2: Operation at the time of start   | 2                    | For the machines other than LK-1901A, this function is not indicated.   |
| 51 1       | U     | Wiper operation method can be selected.  | 0: Without wiper at the time of thread trimming on the way<br>1: With wiper at the time of thread trimming on the way<br>①<br>2: With wiper at the time of thread trimming on the way ②<br>3: Magnet wiper | 1                    | ① Without return of the last wiper<br>② With return of the last wiper (When the setting No. 37:1 of the memory switch, wiper operation method can not be used.) |
| 52 --      | S     | Magnet wipe-out time (Setting possible in the unit of 10ms)  | 10~500ms   | 50                   | Effective only if the magnet wiper has been selected.   |
| 53 --      | S     | Magnet wipe-in time (Setting possible in the unit of 10ms)   | 10~500ms   | 100                  |   |
| 54 0       | S     | Wipe-out timing at the time of upper dead point stop   | 0: Sewing machine returned and upper dead point stop after wiper operation in up position.<br>1: Wiper operation after upper dead point stop   | 0                    | Effective only if upper dead point stop is selected.  |
| 55 0       | U     | The stitching at the start of sewing of the pattern for button sewing can be prohibited. For LK-1903A only   | 0: The stitching effective<br>1: Tie stitching ineffective   | 0                    | For the machines other than LK-1903A, thus function is not indicated.   |
| 56 --      | S     | Moving limit range in +X direction (right side)  | -20~20mm   | 20                   | In the state of shipment, no clamp configuration is considered.   |
| 57 --      | S     | Moving limit range in -X direction (left side)   | -20~20mm   | -20                  | In the state of shipment, no clamp configuration is considered.   |
| 58 --      | S     | Moving limit range in +Y direction (back side)   | -20~10mm   | 10                   | In the state of shipment, no clamp configuration is considered.   |
| 59 --      | S     | Moving limit range in -Y direction (front side)  | -20~10mm   | -20                  | In the state of shipment, no clamp configuration is considered.   |
| 60 --      | S     | Jump feed speed of XY (Setting possible in the unit of 10pps)  | 100~4000pps  | 2000                 |   |

| Indication | Level | Functions   | Setting range  | State when delivered                                      | Remarks   |
|------------|-------|---|--|---|---|
| 61--       | S     | XY feed forward / back speed<br>(Setting possible in the unit of 10pps)   | 100~400pps   | 500   |   |
| 62 0       | S     | When the power supply is turned on, automatic preparation is possible without pressing the READY key.                   | 0: Normal<br>1: Automatic preparation is operated when the power supply is ON.   | 0   |   |
| 63 0       | S     | While the needle stays in an upper position, a current is maintained in the main motor to make the needle hard to down. | 0: Holding disabled<br>1: Holding enabled  | 0   |   |
| 64 0       | U     | Method of XY enlargement/reduction scale rate setting (IP200 only)  | 0: % setting<br>1: Size setting  | 0   | Displayed only for the IP200 operation panel.   |
| 65 0       | U     | The origin is moved toward the front by 5mm.  | 0: Standard<br>1: 5mm closer to the front  | 0   | This setting is needed when using the LK1904 presser foot and patterns.   |
| 6645       | S     | No. of pulses for work clamp foot interlock wiper operation   | 30~60  | 45  |   |
| 150 0      | S     | The head falling detector switch can be disabled.   | 0: Normal<br>1: Head falling detector switch disabled  | 0   |   |
| 201--      | U     | This function sets whether or not the calling of the pattern data is operative.   | 0: Calling inoperative<br>1: Calling operative   | Setting depends on the model used.                        | Standard pattern Nos. 1 to 64 can be individually set (Standard operation panel)  |
| 241 0      | S     | Initialization of model's specifications is executed.   | 0:LK1900ASS<br>1:LK1900AHS<br>2:LK1900AFS<br>3:LK1900AMS<br>4:LK1901ASS<br>5:LK1902ASS<br>6:LK1902AHS<br>7:LK1903ASS-301<br>8:LK1903ASS-302<br>9:LK1903ASS-311/BR35<br>10:LK1903ASS-312/BR35<br>11:LK1900AWS | Setting values are specified at left according to models. | Contents of the memory switches are initialized to the state when delivered.<br>The thread tension of each standard pattern is initialized to the state when delivered.<br>All the registrations patterns and cycles are deleted. |
| 245--      | U     | Grease-up error   | The number of stitches is counted based on drive, sewing machine.  |   | Only clearing possible with the RESET key.<br>Clearing should be done after the completion of grease-up action.   |
| P----      | U     | Pattern registration is carried out.  |  |   |   |
| C----      | U     | Cycle sewing registration is carried out.   |  |   |   |
| CP---      | S     | Test mode is assumed.   |  |   |   |