

JIN

NA-35UT-1

Direct Drive, 1-needle, Post-bed, Top and Bottom Wheel-Feed,
Needle-Feed, Lockstitch Machine with Automatic Thread trimmer

直驱单针柱状上下罗拉送布&针送布平缝自动切线机

NA-35UT-2

Direct Drive, 2-needle, Post-bed, Top and Bottom Wheel-Feed,
Lockstitch Machine with Automatic Thread trimmer

直驱2针柱状上下罗拉送布平缝自动切线机

INSTRUCTION MANUAL (Panel)
使用说明书（操作盘）

NA-35UT 全自动一体机罗拉车系列使用说明书

1. 安全上的注意事项:

- 使用前请详细阅读本技术资料与所搭配的缝制机械说明书，配合正确使用。
- (1) 电源电压与工作频率：请遵照马达与控制箱铭牌所标之规格。
 - (2) 电磁波干扰：请远离高频磁波机器或电波发射器等，以免所产生的电磁波干扰本驱动装置因而发生错误作。
 - (3) 接地：为防止杂讯干扰或漏电事故，请做好接地工程（包括缝纫机、马达、控制箱、定位器）。
 - 1.2 拆卸马达或控制箱时勿带电拔插；控制箱里面有危险高压电，所以关闭电源后要等 1 分钟以上方可打开控制箱盖。
 - 1.3 为保证人身安全，请在维修机械或进行穿针作业时关闭电源。
 - 1.4 这个标志符号表示机器安装时，如有错误恐会伤害到人体或机器会受到损坏。所以机器方面有危险性的地方会有此标志。
 - 这个标志符号表示有高压电等，电气方面有危险性的地方会有此标志。
 - 1.5 本装置保证在正常工作情况且无人为失误的操作下，保修期为一年。

2. 系统参数表

No	项目	内容	设定范围	默认值	级别
1	踏板最高速	设定踏板的最高转速	200~3000rpm	2000	I
2	软起动功能	0: 无软起动功能 1~99: 软起动针数	0~99	3	I
3	装饰性固缝设定	实现完美装饰性固缝针迹的功能 0: 无效 1: 有效	0/1	1	I
4	定长缝最高速	设定定长缝最高速度	200~3000rpm	2000	I
5	简易缝纫模式设定	0: 自由缝纫 1: 简易缝纫	0/1	0	I
9	倒缝开关限速度	可以防止倒缝断针	500~1500rpm	700	I
18	前固缝衔接后固缝动作设定	前固缝结束立即后踩剪线不带后固缝功能设定 0: 无效 1: 有效	0/1	0	I
19	前固缝结束后停止	0: 无效 1: 有效	0/1	0	I
20	倒缝开关功能设定	0: 仅倒缝 1: 倒缝加补针 2: 仅倒缝，待机不动作	0/1/2	0	I
21	软启动速度 1	软启动第 1 针速度	100~3000rpm	400	I
22	软启动速度 2	软启动第 2 针速度	100~3000rpm	600	I
23	软启动速度 3	软启动第 3~9 针速度	100~3000rpm	600	I
24	压脚软下降功能	0: 无效 1: 有效	0/1	0	I
25	抬压脚使能	抬压脚使能设定 0: 无效 1: 有效	0/1	1	I
27	上电定位	0: 无效 1: 有效	0/1	0	I
28	翻抬开关信号模式	机头翻抬开关信号模式设定 0: 常开 1: 常闭 2: 禁止保护	0/1/2	0	I
29	压脚软下降时间	时间越长压脚下降越慢	50~500ms	300	II
30	底线倍率设定	0: 无效 5/10/15/20: 底线倍率	0/5/10/15/20	0	I
31	底线初值设定	底线初值设定	200~3000	1600	I
32	装饰固缝停顿时间	装饰固缝停顿时间设定	5~500ms	50	I
33	装饰性固缝针角度	装饰性固缝时，倒缝动作停针角度	20~120	100	II
34	标准固缝速度模式	0: 自动固缝速度 1: 踏板速度	0/1	0	II
35	计件倍率设定	0: 无计件功能 1~20: 计件按倍数+1	0~20	0	I
36	计件数初值设定	计件数初值设定	0~1000	100	I
41	低速速度	踏板最低速度	100~400rpm	200	I
42	踏板曲线选择	0: 正常 1: 加速慢 2: 加速快	0/1/2	0	I
44	剪线速度	剪线速度	100~400rpm	260	I
45	倒缝开关限速	防止倒缝断针 0: 无限速 1: 有限速	0/1	0	I
46	放压脚延迟时间	为确认压脚已放下的延时	0~800ms	50	II
47	抬压脚全压时间	抬压脚全压输出时间	0~800ms	150	II
48	抬压脚输出占空比	抬压脚输出占空比	0~100	30	II
49	抬压脚保持时间	抬压脚保持时间后强制关断	1~60(s)	12	II
50	倒缝全压输出时间	倒缝全压输出时间	0~800ms	150	II
51	倒缝输出占空比	倒缝输出占空比	0~100	60	II
52	倒缝保持时间	倒缝保持时间后强制关断	1~60(s)	25	II
53	前固缝速度	前加固缝速度	100~3000rpm	1200	I
54	前固缝补偿 1	前固缝针迹补偿参数	0~100	20	I
55	前固缝补偿 2	前固缝针迹补偿参数	0~100	12	I
56	后固缝速度	后加固缝速度	100~3000rpm	1200	I
57	后固缝补偿 1	后固缝针迹补偿参数	0~100	20	I
58	后固缝补偿 2	后固缝针迹补偿参数	0~100	12	I
59	连续固缝速度	连续加固缝速度	100~3000rpm	1200	I
60	连续固缝补偿 1	连续固缝针迹补偿参数	0~100	20	I
61	连续固缝补偿 2	连续固缝针迹补偿参数	0~100	12	I
62	开始运行的踏板行程	开始运行的踏板位置，相对于踏板中立时的行程	10~50	30	II
63	开始加速的踏板行程	开始加速运行的踏板位置，相对于踏板中立时的行程	10~100	55	II
64	运行高速的踏板行程	运行到最高速的踏板位置，相对于踏板中立时的行程	10~150	110	II
65	压脚升起的踏板行程	压脚抬起动作的踏板位置，相对于踏板中立时的行程	-100~-10	-30	II
66	压脚降下的踏板行程	压脚放下动作的踏板位置，相对于踏板中立时的行程	5~50	10	II
67	剪线动作的踏板行程 1	有抬压脚功能时，开始剪线的踏板位置相对于踏板中立时的行程	-100~-10	-30	II
68	剪线动作的踏板行程 2	有抬压脚功能时，开始剪线的踏板位置相对于踏板中立时的行程	-100~-10	-60	II
69	下停针位	下停针位位置调整	0~240	60	I
70	反转提针功能	0: 无效 1: 有效	0/1	0	I
71	反转提针角度	反转提针角度	0~90°	45	I
75	机针位置调整	调整机针位置	0~240°	10	I
76	上停针脚微调	上停针脚微调	90~110	100	I
77	上死点角度	上死点角度	270~360	360	I
78	机头按键功能切换	0: 固缝翻转 1: 补针	0/1	1	I
79	恢复出厂参数	特殊功能参数（维持 2s 有效自动变为 0） 5: 恢复出厂参数	0~15	0	I
80	缝纫最高速度	缝纫最高转速	200~3000spm	2200	II
82	试用时间设定	0: 无效 1~1000 时间调整	0~1000	0	II
83	加重功能	0: 无效 1~15 力度调节	0~15	0	II
84	减噪音功能	0~15 减噪音调节	0~15	8	II
85	剪线吸合角度	剪线吸合角度设定	150~200	60	II
86	剪线加力角度	剪线加力角度设定	200~300	260	II
87	剪线释放角度	剪线释放角度设定	300~360	340	II
88	松线吸合角度	松线吸合角度	150~250	300	II
89	松线释放角度	松线释放角度	270~360	320	II
90	松线保持时间	松线保持时间	1~60	1	II
92	踏板抬压脚命令时间	踏板后踩，抬压脚命令有效时确认时间	10~300ms	80	II
93	踏板中立位置	踏板中立位置微调	-15~-15(0.1)	0	II

以上参数如与实际参数不符，以实际参数为准

3. 接地方法说明

3.1 用电安全提示：为防止杂讯干扰或漏电事故，请做好接地工程。

3.2 接地步骤一，要求 O型接头端子一端接机头端，固定在机头下方有螺丝处。

3.3 接地步骤二，要求 鳄鱼夹端固定接地端（可夹在生产线铁架或者接地的铁架上）。

4. 系统监控状态

操作面板默认模式下，按 P 键后同时按下定针缝触发选择键，进入系统监控状态。通过 +、- 键选择需要查看的项目，按 S 键进入 / 返回所选项目。如需退出监控界面，按 P 键即可。

显示序号	项目名称	单位	显示序号	项目名称	单位
JJ	计件数	件	U6	电机初始角	度
U1	电机速度	rpm	U7	主控程序版本/机型	/
U2	电机电流	0.01A	U8	机型/主控程序版本	/
U3	母线电压	V	U9	DSP 编号	
U4	踏板电压	0.01V	VEr	操作盒程序版本	/
U5	机头机械角	度	TYPE	软件编号	

5. 操作盒使用说明

功能	按键	描述
起始固缝		执行起始固缝来回 1~2 次
终止固缝		执行终止固缝来回 1~2 次
连续固缝		1. 前踩踏板可自动执行来回缝纫动作，次数由 D 段设定，最高可达 15 次。 2. 连续固缝模式默认为触发模式，无需踏板一直踩下，对应定针缝灯常亮。 3. 该功能有效时，前后固缝设定无效。
定针缝触发		1. 此键定针缝有效。触发踏板，系统自动执行 E、F、G、H 段的针数， 2. 连续固缝模式，此键对应的灯常亮，表明连续固缝模式默认为触发模式。
剪线选择		设定或取消剪线功能。
停针位		设定停针位快捷键，按键有效为上停针，取消按键功能设定为下停针。
中间压脚		中间抬压脚使能设定快捷键：设定或取消中间抬压脚功能。
剪线压脚		剪线后抬压脚设定快捷键：设定或取消剪线后抬压脚功能。
软启动		软启动设定快捷键：设定或取消踏板软启动功能。
针数设定/查看选择		1、执行该键，可循环切换显示屏上中下针数设定的显示值。 上端：A、B、C、D 段针数，对应水平灯亮； 中端：E、F 段针数，与之对应水平灯亮； 下端：G、H 段针数，与之对应水平灯亮。 2、对应 A、D 段针数，可设范围 0~15 针，B、C 段针数，可设范围 1~15 针，其中，液晶显示 A、b、C、d、E、F 字样各代表 10、11、12、13、14、15 针。对应 E、F、G、H 段针数，可设范围 0~99 针。 3、对于带夹线功能机型，长按此键可显示夹线力度调整（上中下三个指示灯同时亮，液晶显示“[]”），再次按该键退出
参数设定		进入不同参数级别 缝纫设定界面下短按 P 键进入【参数界面】，此时显示参数列表中级别为 I 的参数。 缝纫设定界面下长按 P 键进入【密码输入界面】，输入正确维修密码后按 P 键进入【参数界面】，此时显示参数列表中级别为 I 和 II 的参数。
示教功能		设定或取消示教功能。（适用液晶操作面板）
程序缝设定		段针缝设定，最多可设定 P1~PF 共 15 段的针数（适用液晶操作面板）
调速键		减调速键。连续按下，缝纫速度降低，显示屏自动切换为速度设定值。简易缝，自由缝有效。（适用液晶操作面板）
		增调速键。连续按下，缝纫速度升高，显示屏自动切换为速度设定值。简易缝，自由缝有效。（适用液晶操作面板）

示教模式：

在定长缝（一段、四段、程序缝）模式下，长按 “T” 键 1 秒，就可进入示教界面，此界面下可用按键有：T 键，两组加减键，补针键。作用如下：
加减速 12：更改示教段数，段数值只能向上累加（进入下一段示教自动保存上次的针数值），减 “-” 键无效。须注意：当踏板踩下运行时，按键无效；
加减速 34：修改示教针数，在停止运行时可对针数进行调整。
补针键：按下后可以手动补针，更改针数。

6. 标准固缝模式针迹补偿调整

前固缝 No.54	正缝倒缝接合</td

NA-35UT series manual

1. Safety instruction

Please read the operation manual and related sewing machinery dataset carefully before correct use.

1.1 Power voltage and frequency: please refer to motor and control box nameplate.

(2) Interference from electromagnetic wave: please keep far away strong magnetic or high radiation environment in order to avoid obstructions and make to misoperation.

(3) Grounding: to avoid the noise obstructions or leakage of electricity accident(including sewing machine, motor, control box and positioner).

1.2 Please make sure power off at least 1min and then can open control box cover, because there are dangerous high voltage.

1.3 Please turn off the power while repairing or wearing needle in order to protect operator's safety.

1.4 Used where potential dangers exist.

Used where high voltage and electric danger exist.

1.5 Product warranty period of one year on condition that this machine is operated correctly and no man-made damage.

2. System parameter table

No	Project	Content	Setting range	default value	Level
1	Sewing speed	Set sewing speed	200~3000rpm	2000	I
2	Soft-start function	0: No soft-start function 1~99: Soft start stitches	0~99	3	I
3	Ornamental bartacks	0: Invalid 1: Effective	0/1	1	I
4	Fixed-length seam sewing speed	Set fixed-length seam sewing speed	200~3000rpm	2000	I
5	Sewing mode	0: Free sewing 1: Simple Sewing	0/1	0	I
9	Reverse limited feed speed	Reverse limited feed speed, when the manual switch closed	500~1500rpm	700	I
19	Function of stop after bartack at the start of sewing	Function of stop after bartack at the start of sewing 0: Invalid 1: Effective	0/1	0	I
20	The manual switch function of the reverse feed stitching of sewing	0: Only reverse feed stitching 1: And needle compensation 2: Only reverse feed stitching, standby does not work	0/1/2	0	I
21	Soft-start speed 1	The first stitch speed	100~3000rpm	400	I
22	Soft-start speed 2	The second stitch speed	100~3000rpm	600	I
23	Soft-start speed 3	The third stitch speed	100~3000rpm	600	I
24	Function of soft-down of presserfoot	0: Invalid 1: Positive	0/1	0	I
25	Enable presser foot lift	0: Disable 1: Enable	0/1	1	I
27	Up-position function	0: Invalid 1: Valid	0/1	0	I
28	Safety switch signal mode	0: Normally open 1: Normally closed 2: No protection	0/1/2	0	I
29	The time of soft-down of pressure foot	The time of soft-down of pressure foot (time longer, down more slowly)	50~500ms	300	II
30	The bottom line magnification setting	0: Invalid 5/10/15/20: Bottom line rate	0/5/10/15/20	0	I
31	Initial baseline setting	Initial baseline setting	200~3000	1600	I
32	Ornamental bartacks pause time	Ornamental bartacks pause time	5~500ms	50	I
34	Standard bartacks, pedal speed source choice	0: automatic standard bartacks speed 1: pedal analog speed	0/1	0	II
35	Piece-rate setting	0: No piece-function 1~50:(Piece multiples)+1	0~20	0	I
36	Initial set piececount	Initial set piececount	0~1000	100	I
41	Slow speed	The lowest pedal speed	100~400rpm	200	I
42	Pedal curve selection	0: Normal 1: Slow acc. 2: Fast acc	0/1/2	0	I
44	Cutting speed	Cutting speed	100~1000rpm	200	I
45	Reverse limited feed speed enable	0: Disable 1: Enable	0/1	0	I
46	Delay Sewing time, when presser foot down	Delay Sewing time, when presser foot down	0~800ms	50	II
47	Time of presser foot magnet full voltage output	Time of presser foot magnet full voltage output	0~800ms	150	II
48	Presser foot magnet voltage output duty cycle	Presser foot magnet voltage output duty cycle	0~100	40	II
49	Presser foot magnet lift holding time	Presser foot magnet lift holding time	1~60(s)	12	II
50	Time of reverse feed stitching magnet full voltage output	Time of reverse feed stitching magnet full voltage output	0~800ms	150	II
51	Reverse feed stitching magnet duty cycle	Reverse feed stitching magnet duty cycle	0~100	45	II
52	Reverse feed stitching magnet holding time	Reverse feed stitching magnet holding time	1~60(s)	12	II
53	Speed of bartack at the start of sewing	Speed of bartack at the start of sewing	100~3000rpm	700	I
54	Bartack at the start of sewing compensation 1	Bartack at the start of sewing compensation 1	0~100	20	I
55	Bartack at the start of sewing compensation 2	Bartack at the start of sewing compensation 2	0~100	12	I
56	Speed of bartack at the end of sewing	Speed of bartack at the end of sewing	100~3000rpm	700	I
57	Bartack at the end of sewing compensation 1	Bartack at the end of sewing compensation 1	0~100	20	I
58	Bartack at the end of sewing compensation 2	Bartack at the end of sewing compensation 2	0~100	12	I
59	Overlapped sewing speed	Overlapped sewing speed	100~3000rpm	700	I
60	Overlapped sewing speed compensation 1	Overlapped sewing speed compensation 1	0~100	20	I
61	Overlapped sewing speed compensation 2	Overlapped sewing speed compensation 2	0~100	12	I
62	Pedal travel upon start	Pedal position upon start Travel relative to medium pedal	10~50	25	II
63	Pedal travel upon acceleration	Pedal position upon start acceleration Travel relative to medium pedal	10~100	50	II
64	Pedal travel at highest rotation speed	Pedal position at highest rotating speed Travel relative to medium pedal	10~150	110	II
65	Pedal travel upon presser foot lift	Pedal position upon pedal lift Travel relative to medium pedal	-100~-10	-30	II
66	Pedal travel upon presser foot lowering	Pedal travel from presser foot lowering position to neutral position Travel relative to medium pedal	5~50	10	II
67	Pedal travel 1 upon thread trimming	Pedal position upon start trimming without presser foot function Travel relative to medium pedal	-100~-10	-30	II
68	Pedal travel 2 upon tread trimming	Pedal position upon start thread trimming with presser foot function Travel relative to medium pedal	-100~-10	-60	II
69	Down needle positioning position	To adjust down needle position	0~240	60	I
70	Reverse needle lift function	0: Disable 1: Enable	0/1	0	I
71	Reversal of needle lift angle	Reversal of needle lift angle	0~90°	45	I
75	Needle position adjustment	Needle position adjustment	0~240°	214	I
76	Stop needle position minor adjustment	Stop needle position minor adjustment	90~110	100	I
77	Needle bar maximum angle	Needle bar maximum angle	270~360	290	I
78	Keyswitch function selection	0: Fixed sewing reverse 1: Supplementary needle	0/1	0	I
79	return to factory-set parameter	5: restore the current level factory parameters 8: restore the current level and sewing factory parameter set According to S button, select yes, then press the S key execution	0~15	0	I
80	highest speed of sewing	Highest speed of sewing	200~3000rpm	2500	II
82	Set period of use	0: Disable; 1~1000(Take hours as a unit)	0~1000	0	II
83	Aggravating function/ Machine needle emphasis function	Needle wear through cloth when used 0: invalid; 1~15 strength regulation	0~15	0	II
84	Reduce noise	0~15 Reduce noise	0~15	0	II
85	Cutting magnet pull angle	Cutting magnet pull angle	150~200	60	II
86	Power angle of shear line	To set power angle of shear line	200~300	260	II
87	Cutting magnet release angle	Cutting magnet release angle	300~360	340	II
88	Loose magnet pull angle	Loose magnet pull angle	150~250	300	II
89	Up dead position angle	Up dead position angle	270~360	320	II
90	Line slack holding time	Line slack holding time	1~60	1	II
92	Pedal presser foot lift confirm time	Pedal presser foot lift confirm time	10~300ms	80	II
93	dial line / clip line Type selection	Type selection; 0: dial line 1: clip line	-15~15(0,1)	0	II

3. System Info

Operation panel default mode, press the button at the same time in P mode sewing needle trigger select key, enter the system monitoring state through the + key choose need to look at the project, according to the S button to enter/exit the selected projects such as the need to exit monitoring interface, according to P keys can be.

showframe numbers	Item Name	unit	showframe numbers	Item Name	unit
JJ	Plan number	piece	U6	Motor initial Angle	limit
U1	speed of motor control	rpm	U7	Master control program version/ Head type	/
U2	Motor Current	0.01A	U8	Head type/ Master control program version	/
U3	Motor Voltage	V	U9	Dsp no	/
U4	Pedal voltage	0.01V	vEr	Operation box version of the program	/
U5	Mechanical Angle with	limit	TYPE	Software no	/

4. Operation box use

Function	Button	Described
Starting reinforcing-sewing		Execute starting reinforcing-sewing 2 times, to and fro.
ending reinforcing-sewing		Execute ending reinforcing-sewing 2 times, to and fro.
continuous reinforcing-sewing		1. Press treadle a head for automatic sewing, to and fro, which is set at D and can reach 15 times.(F) 2. Continuous reinforcing-sewing is in trigger mode by default, treadle doesn't need to be kept being pressed, and corresponding trigger light of preset sewing is solid lit. 3. Previous ending reinforcing-sewing setting is invalid if this function is valid.
parameter setting		1. For preset sewing, Trigger treadle and the system will automatically conduct sewing a E, F, G, H sections, the treadle doesn't need to be kept being pressed.2.Solid light for continuous reinforcing-sewing mode means that it is trigger mode by default.
thread-cutting		Set or cancel thread-cutting function.
needle position		Set the needle position shortcut keys, Key is effective for needle, The cancel key function is set to stop pin. .
The middle presser foot		Presser foot to set shortcut keys: set or cancel the presser foot function.
Shear line pressure foot		The shear line and presser foot set shortcut keys: set or cancel trimmer and presser foot function.
Soft start		Soft start to set shortcut keys: set or cancel the pedal soft start function.
Pinnumber set/check choice		1.Implementation of this key, circulating switch display 3 pin number to set the display value upper end A, B, C, D Period of pin number, Light corresponding level; Middle end E, F Period of pin number, Light corresponding level; lower extreme G, H Period of pin number, Light corresponding level; 2.Corresponding to A/D period of pin number, can set range 0~15 needle, B paragraph C pin number, can set range 1~15 needle, among them, the liquid crystal display A B CD EF on each for 10 11 12 13 14 15 stiches.
parameter setting		1.Entering different parameter level On the sewing setting interface, the user can press the button P to enter the Parameter Interface, then the Level I parameters in the parameter list will display. On the sewing setting interface, the user can keep pressing the button for a few seconds to enter the Password Entering Interface. After entering the right maintenance password, then the user can press the button P to enter the Parameter Interface, now the Level I and Level II parameters in the parameter list will display. 2.Password setting On the sewing setting interface, the user can keep pressing the button P for a few seconds to enter the Password Entering Interface, and press the button combination of "burst button + soft start button" to enter the Password Resetting Interface. The three indicators (respectively are Indicator S1, S2 and S3 from left to right/before three lamp, among which one is on) corresponding to the button S indicates the current status. S1 lights up, old password input, ending the key combination trigger key + tangent key, if the correct password into the password reset interface (mistakes have stayed the S1 state), and at the same time S2 light, prompting the input new password and click confirm S3 S key input again when the light is the new password, according to S key after two input if consistent, then set success, return to parameter interface if the newpasswords entered are not the same, the indicator S1 will be on and the LScreen will be reset, and the user shall enter the old password again. If the user presses the button P, the user will be brought back to the interface parameters and no modification will be saved. You can choose from the numbers of 0 to 9 or the letters of A to F for every single character of the password. Please do keep the new password in mind.
Teaching function		Set or cancel the teaching function.
Sewing set program		The number of needles sewing set, Set up a total of 15 segment needle number P1~PF.
speed key	 	Speed down. Keeping pressing to lower speed, the display will automatically switch to speed set. Simple seam, free seam effective. Speed up. Keeping pressing to increase speed, the display will automatically switch to speed set. Simple seam, free seam effective.

5. Standard needle stitch compensation adjustment

Starting reinforcing-sewing No.54	Forward sewing and reverse stitching joint		Reverse stitch number Become less and shorter, To adjust the parameters to a higher value.No.54		Forward sewing number Become less and shorter, Adjust the parameters to lower values No.54
ending reinforcing-sewing<br					