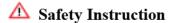
# GN7100D3 QD2622E INSTRUCTION BOOK

HIGH SPEED OVERLOCK SEWING MACHINE



**TYPICAL** 



- 1) Users are required to read the operation manual completely and carefully before installation or operation.
- 2) The product should be installed and pre-operated by well trained persons
- 3) All the instruction marked with sign  $\triangle$ , must be observed or executed; otherwise, bodily injuries might occur.
- 4) For perfect operation and safety, it is prohibited that using extension cable with multi-outlet for power connection
- 5) When connecting power supply cords to power sources, it is necessary to make sure that the power voltage is lower than 250V AC and matches the rated voltage indicated on the motor's name plate.

\*\*Attention: If the Control Box is AC 220V system, please don't connect the Control Box to AC 380V power outlet. Otherwise, the error will occur and motor will not work. If that happens, please turn off the power immediately and check the power voltage. Continue supply 380V power over 5 minutes might damage the fuse F2, burst the electrolytic capacitors and the power module U14 of the main board and even might endanger the person safety.

- 6) Please don't operate in direct sun light, outdoors area and where the room temperature is over 45°C or below 0°C.
- 7) Please avoid operating near the heater at dew area or at the humidity below 10% or above 95%.
- 8) Please don't operate in area with heavy dust, corrosive substance or volatile gas.
- 9) Avoid power cord being applied by heavy objects or excessive force, or over bend.
- 10) The earth wire of power cord must be connected to the system ground of the production plant by proper size of conductions and terminals. This connection should be fixed permanently.
- 11) All the moving portions must be prevented to be exposed by the parts provided.
- 12) Turing on the machine in the first time, operate the sewing machine at low speed and check the correct rotation direction.
- 13) Turn off the power before the following operation:
- 1. Connecting or disconnecting any connectors on the control box or motor.
- 2. Threading needle.
- 3. Raising the machine arm.
- 4. Repairing or doing any mechanical adjustment.
- 5. Machine is out of work.
- 14) Repairing and high level maintenance work should only be done by electronic technicians with appropriate training.
- 15) All the spare parts for repairing work must be provided or approved by the manufacturer.
- 16) Don't use any objects to hit or ram the product.

Guarantee Time

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

Warranty Detail

Any trouble found within warranty period under normal operation, it will be repaired free of charge.

However, maintenance cost will be charged in the following cases even if within warranty period:

- 1. Inappropriate use, including: wrong connecting high voltage, wrong application, disassemble, repair, modification by incompetent personnel, or operation without the precaution, or operation out of its specification range, or inserting other objects or liquids into the product.
- 2. Damage by fire, Earth quake, lighting, wind, flood, salt corrosive, moisture, abnormal power voltage and any other damage cause by the natural disaster or by the inappropriate environments.
- 3. Dropping after purchasing or damage in transportation by customer himself or by customer's shipping agency.
- \* Note: We make our best effort to test and manufacture the product for assuring the quality. However, it is possible that this all a failsafe device. (Such as residual current breaker).

#### 1. Key Description

NO.	Icon	Name	Function Description
1	Р	Function Key	<ol> <li>In the normal mode hold [P] key enter to User parameter setting mode.</li> <li>In the shut-off condition, hold [P] key turn on machine enter to technician parameter setting mode.</li> <li>Under the parameter setting interface, press [P] key to return but not save the parameter.</li> </ol>
2	S	Setting Parameter Check And Save	<ol> <li>Under the parameter setting interface, press [S] key to save setting.</li> <li>In the normal mode, press [S] key to change languages.</li> </ol>
3	+	Parameter Increase/Speed Increase	Increase the parameter / Increase the sewing speed
4	_	Parameter Decrease/Speed Decrease	Decrease the parameter / Decrease the sewing speed
5	<b>←</b>	Left Key / LED+	Parameter item and parameter contents decrease / Increase LED brightness
6	$\rightarrow$	Right Key / LED-	Parameter item and parameter contents increase / Decrease LED brightness
7	$\times$	Thread Trimming	Press left and right key it can execute the cycle shift of forward trimming on, forward trimming off, backward trimming on, backward trimming off.  Long-press 3 sec to enter to trimming setting.
8	0	Mode Selection Shortcut Key	Press this key can execute the cycle shift of the following four modes: Long-press 3 sec to enter to mode selection setting.  1. Full automatic: start-up according full sensor signal.  2. Free sewing.  3. Semi- automatic: start-up according to front sensor signal + pedal completion (same as P-05).  4. Full manual: start-up according to the pedal completion.
9	<b>O</b>	Auto-suction	Press this key it can execute the cycle shift of suction off, forward suction on, backward suction on, suction on.  Long-press 3 sec to enter to auto-suction setting.
10	<u>‡</u> _	Presser Foot Lifting Mode Shortcut Key	Press this key it can execute the cycle shift of Front foot lifting, Rear foot lifting, front and rear foot lifting, close, valid after setting press S key to save (same as P-10).  Long-press 3 sec to enter to presser foot lifting mode setting.
11	<b>₫</b>	Sensor Situation Check Shortcut Key	<ol> <li>Short-press this key can check sensor sensitivity real value of front sensor, mid-sensor, back-sensor.</li> <li>Long-press this key can enter sensor sensitivity setting interface, please according to the display interface operation.</li> </ol>
12	● 一键恢复 Reset	Reset	Use needle insert hole, after long-press 3 sec after beep then restore factory setting.

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	①F		1. When the front sensor receive with cloth, the F-SENSOR LED will be	
			lighted; without cloth the LED OFF.	
		①F-SENSOR 2		2. When the Mid-sensor receive with cloth, the M-sensor LED will be lighted;
	1.2		②M-SENSOR	without cloth the LED OFF.
		③B-SENSOR	3. When the back sensor receive with cloth, the B-SENSOR receive with	
		<b>4</b> STATE	cloth, the B-SENSOR LED will be lighted; without cloth the LED OFF.	
				4. When the machine is running normally, the STATE LED will be green; or it
				will be red.

### 2. Special function operation definition

No.	Function name	Function Description
		1. Under the shutdown state, press left key and right key at the same time
1	Restore factory setting	to turn on machine, display screen show P-26, press [S] key confirm.
1	Restore factory setting	2. Shortcut mode: Use needle insert RESET hole, after long-press 3 sec
		after beep then restore factory setting.
		1. Under the shutdown state, press [P] +[S] key at the same time to turn on
		machine, display P-70;
2	UP position	2. Adjust parameter P-72;
2	adjustment by manual	3. From hand-wheel direction, clockwise turn hand-wheel to up position,
		press [S] key to save the current value as down position just can
		fine-tuning.
		1. Under the shutdown state, press [P] +[S] key at the same time to turn on
		machine, display P-70;
3	Down position	2. Adjust parameter P-73;
3	adjustment	3. From hand-wheel direction, clockwise turn hand-wheel to down
		position, press [S] key to save the current value as down position just can
		fine-tuning.
		1. Under the normal mode interface long-press + and - at the same
		1. Under the normal mode interface long-press $\checkmark$ and $\checkmark$ at the same
	Sensor sensitivity	time, it can direct access sensor sensitivity adjustment interface;
4	adjustment	2. Please remove cloth after Three-sensor, press key;
		3. Please cover cloth after three-sensor, press key, finished setting.

#### 3 System Parameter Setting Definition

#### 3.1 Electric /air-powered machine type parameter setting

User Para	User Parameter ( Under the normal mode press P key to access)					
No.	No. Function parameters Range Default Description					
P-01	Maximum Sewing Speed (r/min)	100-6000	5000	Maximum sewing speed setting		

P-02	Needle stop positioning selection	0-1	0	0: Up needle position 1: Down Needle position
P-03	Start sewing speed (r/min)	100-6000	4000	With trimming function: the speed setting for front sensor trigger start-up and Back sensor signal finish (before trimming)
P-04	Start-up mode	0-1	0	(Valid for full-automatic mode)  0: Automatic mode (start-up)  1: Foot control mode (Start-up by Front sensor + toe down the pedal)
P-05	Automatic/semi-automatic mode selection	0-1	1	(P-06 is turn on) 0: Semi-automatic 1: Automatic)
P-06	Auto sensing switch	0-1	1	0: OFF (Full manual mode is turn on) 1: ON (It can execute automatic/ semi-automatic mode also match with P-05 use)
P-07	Automatic thread tension release switch	0-3	3	0: OFF 1: Backward thread tension release
P-08	Auto suction	0-4	3	0: OFF 1: Front trimming suction 2: Rear trimming suction 3: Front and rear trimming suction 4: Long trimming suction
P-09	Automatic cloth feeding	0-2	0	0: OFF 1: Spreading on the sewing 2: Spreading after sewing
P-10	Auto presser foot lifting	0-3	0	0: OFF 1: Front foot-lifting (Front sensor receive signal) 2: Rear foot-lifting (Rear sensor signal after finish) 3: Front and Rear foot-lifting
P-11	Presser foot lifting when stop on the sewing	0-1	0	(Valid for full-manual and semi-automatic mode) 0: OFF 1: ON (when stop on the sewing the presser foot lifting automatically)
P-12	Presser foot lifting after trimming	0-1	0	0: OFF 1: ON
P-13	Presser foot lifting when half back treadle	0-2	0	(Valid for full-manual / semi-automatic mode) 0: Presser foot lifting when half back step/ back step 1: Lay down 2: Reverse step up presser foot
P-14	Manual trimming suction	0-2	1	0: No suction 1: Rear suction 2: Front suction and rear suction
P-15	Machine head lamp brightness	0-4	3	0: OFF; 1→4 the brightness grade, the more value the more brightness.
P-16	Low air pressure mode	0-1	0	0: Normal mode 1: Low pressure mode
P-17	Semi automatic continuous sewing	0-1	1	1: OFF 0: Continuous sewing when toe down the treadle
P-18	Semi automatic constant	0-1	0	0: OFF (after finish before trimming not execute P-03 speed)
P-20	Stop position after trimming selection	0-1	1	0: Down position 1: Up position
P-22	Front Receiver E# switch	0-1	0	0: ON (turn on the front sensor, sensor signal + pedal) 1: OFF (Close front sensor, pedal direct turn on)
P-23	Intermittent suction opening time (×100ms)	1-600	20	The more value the more time
P-24	Intermittent air suction off time (×100ms)	0-600	0	0: for no intermittent air suction Front suction off time (valid when P-46 function setting is 1)

P-25   selvage suction synchronization time   0-2000   200   Valid for P-16 setting is 1		Low pressure mode,			
Synchronization time   CP(=6-1)	P-25	_	0-2000	200	Valid for P-16 setting is 1
Technician parameter (Press [P] key and power on to enter)  P-26 The stitches number between two sensors 1-600 100 The delayed stitches number of front trimming P-28 The delayed stitches number of front trimming P-28 The delayed stitches number of front trimming P-29 The delayed stitches number of front trimming P-30 Suction off (ms) The delayed stitches number of front stitch off off trimming suction (ms) P-31 The delayed stitches number of front stitch off trimming suction (ms) P-32 The times when cloth-pulling ON P-35 The delayed stitches number before the machine stops (Stitches) P-36 The response time of front sensor (ms) P-37 Sensor P-38 The sensitivity of front sensor (ms) P-38 The delaying time of front sensor (ms) P-39 The delaying time of front presser foot lifter (ms) P-39 The delaying time of front presser foot lifter (ms) P-39 The delaying time of front presser foot lifter (ms) P-40 P-40 P-40 P-40 P-40 P-40 P-41 Full-on time setting for presser foot lifter (ms) P-43 The times well and the presser foot (ms) P-44 P-45 P-46 P-47 P-47 P-48 P-48 The times (ms) P-49 The delaying time of rear presser foot (ms) P-41 P-42 P-43 The times time for presser foot (ms) P-44 P-45 P-46 P-47 P-47 P-48 P-48 Duty-cycle time setting for presser foot (ms) P-49 Stitch (mm) P-40 P-41 P-41 P-42 P-43 The time for the presser foot (ms) P-44 P-45 P-46 P-46 P-47 P-48 Suction when continuous feeding P-48 Suction when continuous feeding P-48 Suction when continuous feeding P-48 P-49 Stitch (mm) P-49 Stitch (mm) P-40 P-40 P-40 P-40 P-40 P-40 P-40 P-40	1 23	-	0 2000	200	valid for 1 10 detailing to 1
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between two sensors   1-600   100   then can continue running, otherwise a cycle stop.	Technicia		na power on t	o enter)	Cyala pariad parameter. In a sirala the rear sensor receive signal
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P-36   Store Stitches   Store Stitches   Store Stitches   The response time of front sensor (ms)   10-990   50   Front sensor trigger time: the small value the response is fast, the large value the response is follow. In order to adapt different cloth material setting front sensor receive strength.    P-37   The sensitivity of middle sensor   The sensitivity of middle sensor   The sensitivity of middle sensor   The delaying time of front presser foot lifter (ms)   Store the large value the response is slow.   In order to adapt different cloth material setting front sensor receive strength.   In order to adapt different cloth material setting front sensor receive strength.   Under the full automatic/ semi-automatic:   Front trigger retention time after auto-foot-lifting, the larger value the longer retention time.   The starting time of rear presser foot lifter (ms)   The starting time of rear presser foot lifting, the smaller value the faster of response.   The larger value the higher of foot-lifting (Noted: Not too high)   The larger value the higher of foot-lifting (Noted: Not too high)   The action time of presser foot laying down sequence.   Stop on the sewing the presser foot lifting, stop after trimming presser foot limes (ms)   The longer time the large of the trimming force.   Suction when continuous feeding   O-2   O No suction   1: Long suction   2: Synchronizer suction   2: Synchronizer suction   C No suction					After through cloth back-sensor how many stitches will stop the
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P-37 The sensitivity of front sensor P-38 The sensitivity of middle sensor P-39 The delaying time of front presser foot lifter (ms) P-40 Starting time for rear presser foot lifter (ms) P-41 Full-on time setting for presser foot (ms) P-42 Duty-cycle time setting for presser foot laying down (ms) P-43 The time for the presser foot laying down (ms) P-44 Presser foot protection (s) P-45 times (ms) P-46 Suction when continuous feeding P-47 Suction when continuous feeding P-48 Needle goes up as power on Adjustment P-49 Stitch (mm) P-40 Suction when conditions P-41 Down needle position adjustment P-42 Down needle position adjustment P-44 Same as P-73 P-45 Down needle position adjustment P-46 Source of P-47 Down needle position adjustment P-48 Down needle position adjustment P-50 Down needle position adjustment P-50 Down needle position adjustment P-51 Down needle position adjustment P-51 Down needle position adjustment P-50 Down needle position adjustment	P-36	_	10-990	50	
P-38   The sensitivity of middle sensor   Strength.   In order to adapt different cloth material setting mid-sensor receive strength.   Under the full automatic/ semi-automatic:   Front trigger retention time after auto-foot-lifting, the larger value the longer retention time.   P-40   Starting time for rear presser foot lifter (ms)   P-41   Full-on time setting for presser foot (ms)   10-990   50   The larger value the higher of foot-lifting (Noted: Not too high)   P-42   Duty-cycle time setting for presser foot (94)   10-990   100   The action time of presser foot laying down (ms)   10-990   100   The action time of presser foot laying down sequence.   Stop on the sewing the presser foot lifting, stop after trimming presser foot makes (ms)   10-990   100   The longer time the large of the trimming force.   P-46   Suction when continuous feeding presser foot makes (ms)   10-990   100					
P-39 Sensor  The delaying time of front presser foot lifter (ms)  P-40 Starting time for rear presser foot lifter (ms)  P-41 Full-on time setting for presser foot (ms)  P-42 Duty-cycle time setting for presser foot laying down (ms)  P-43 The time for the presser foot laying down (ms)  P-44 Presser foot protection (s)  P-45 times (ms)  P-46 Suction when continuous feeding  P-47 Suction when continuous feeding  P-48 Needle goes up as power on adjustment  P-49 Stitch (mm)  P-40 Starting time of front presser foot laying down key.  P-50 Down needle position adjustment  P-51 Down needle position adjustment  P-51 Down needle position adjustment  P-51 Down needle position adjustment  P-40 Stitch (ms)  P-41 Check Starting time of front presser foot laying time after auto-foot-lifting, the larger value the higher of rear presser foot lifting, the smaller value the faster of response.  P-40 Adjustment for duty-cycle of AFL. Fine tuning can reduce the overheating.  P-41 Adjustment for duty-cycle of AFL. Fine tuning can reduce the overheating.  P-42 Stitch (mm)  P-43 The time for the presser foot laying down sequence.  Stop on the sewing the presser foot lifting, stop after trimming presser foot lifting, positive closing after heeling pedal for retention time.  P-43 The time for the presser foot lifting, positive closing after heeling pedal for retention time.  P-44 Presser foot protection (s)  P-45 Time for the presser foot lifting, positive closing after heeling pedal for retention time.  P-46 Suction when continuous for the presser foot lifting, positive closing after heeling pedal for retention time.  P-47 On O: No suction 1: Long suction  2: Synchronizer suction  P-48 Stitch (mm)  P-49 Stitch (mm)  P-40 Adjustment same as actual needle distance by up and down key.  P-50 Adjustment  P-50 Adjustment  Down needle position  adjustment  P-51 Same as P-72	P-37	sensor	0-700	300	strength.
P-39 The delaying time of front presser foot lifter (ms)  P-40 Starting time for rear presser foot lifter (ms)  P-41 Full-on time setting for presser foot (ms)  P-42 Duty-cycle time setting for presser foot (%)  P-43 The time for the presser foot lift of the presser foot laying down (ms)  P-44 Presser foot protection (s)  P-45 times (ms)  P-46 Suction when continuous feeding  P-47 Suction when continuous feeding  P-48 Needle goes up as power on  P-49 Stitch (mm)  P-40 Stitch (mm)  P-40 Duty-cycle position adjustment  P-41 P-50 Down needle position adjustment  P-50 Starting time of front presser foot lifting, the larger value the longer retention time.  P-50 Down needle position adjustment  P-50 Starting time of front presser foot lifting, the larger value the longer retention time.  P-50 The starting time of rear presser foot lifting, the larger value the larger val	P-38	_	0-700	300	
P-40 Starting time for rear presser foot lifter (ms)  P-41 Full-on time setting for presser foot (ms)  P-42 Duty-cycle time setting for presser foot (ms)  P-43 The time for the presser foot laying down (ms)  P-44 Presser foot protection (s)  P-45 times (ms)  P-46 Suction when continuous feeding  P-47 Suction when continuous feeding  P-48 Needle goes up as power on  P-49 Stitch (mm)  P-40 Stitch (mm)  P-41 The starting time of rear presser foot lifting, the smaller value the faster of response.  The starting time of rear presser foot lifting, the smaller value the faster of response.  The larger value the higher of foot-lifting (Noted: Not too high)  Adjustment for duty-cycle of AFL. Fine tuning can reduce the overheating.  The action time of presser foot laying down sequence.  Stop on the sewing the presser foot lifting, stop after trimming presser foot lifting, positive closing after heeling pedal for retention time.  P-45 times (ms)  P-46 Suction when continuous feeding  P-47 Stitch (mm)  P-48 Stitch (mm)  P-49 Stitch (mm)  1-7 1 Adjustment same as actual needle distance by up and down key.  P-50 Down needle position adjustment  0-24 14 Same as P-72  P-51 Down needle position adjustment  Same as P-73		The delaying time of front			
P-40 Starting time for rear presser foot lifter (ms)  P-41 Full-on time setting for presser foot (ms)  P-42 Duty-cycle time setting for presser foot (%)  P-43 The time for the presser foot laying down (ms)  P-44 Presser foot protection (s)  P-45 times (ms)  P-46 Suction when continuous feeding  P-48 Needle goes up as power on  P-49 Stitch (mm)  P-40 Stitch (mm)  P-40 Duty setting for presser foot lifting (noted: Not too high)  P-41 The starting time of rear presser foot lifting, the smaller value the faster of response.  The starting time of rear presser foot lifting, the smaller value the faster of response.  The larger value the higher of foot-lifting (Noted: Not too high)  Adjustment for duty-cycle of AFL. Fine tuning can reduce the overheating.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot lifting, stop after trimming presser foot lifting, positive closing after heeling pedal for retention time.  P-45 times (ms)  10-990  60 The longer time the large of the trimming force.  P-46 Suction when continuous feeding  P-48 Needle goes up as power on  1-1 0: OFF 1: ON  P-49 Stitch (mm)  1-7 1 Adjustment same as actual needle distance by up and down key.  P-50 Up needle position adjustment  0-24 4 Same as P-72  P-51 Down needle position adjustment  0-24 14 Same as P-73	P-39		500-2000	500	
presser foot lifter (ms)  P-41		Starting time for rear			-
P-41 presser foot (ms)  P-42 Duty-cycle time setting for presser foot (%)  P-43 The time for the presser foot laying down (ms)  P-44 Presser foot protection (s)  P-45 times (ms)  P-46 Suction when continuous feeding  P-48 Needle goes up as power on  P-49 Stitch (mm)  P-49 Stitch (mm)  P-40 Duty-cycle time setting for presser foot (%)  P-40 Duty-cycle time setting for presser foot (%)  P-41 Duty-cycle time setting for hearing.  Adjustment for duty-cycle of AFL. Fine tuning can reduce the overheating.  The action time of presser foot laying down sequence.  Stop on the sewing the presser foot lifting, stop after trimming presser foot lifting, positive closing after heeling pedal for retention time.  P-45 times (ms)  D-46 Suction when continuous feeding  P-47 On  P-48 Needle goes up as power on  P-49 Stitch (mm)  D-20 Down needle position adjustment  D-24 Adjustment for duty-cycle of AFL. Fine tuning can reduce the overheating.  Stop on the sewing the presser foot lifting, positive closing after heeling pedal for retention time.  D-29 On The longer time the large of the trimming force.  D: No suction 1: Long suction  2: Synchronizer suction  D: OFF 1: ON  P-49 Stitch (mm)  D-24 Adjustment same as actual needle distance by up and down key.  P-50 Adjustment  Stop on the sewing the presser foot laying down sequence.  D: No suction 1: Long suction 1: Long suction 2: Synchronizer suction  Stop on the sewing the presser foot laying down sequence.  D: No suction 1: Long suction 2: Synchronizer suction  Stop on the sewing the presser foot laying down sequence.  D: No suction 1: Long suction 2: Synchronizer suction  Stop on the sewing the presser foot laying down sequence.  D: No suction 1: Long suction 2: Synchronizer suction  Stop on the sewing the presser foot laying down sequence.	P-40	_	0-2000	120	
Duty-cycle time setting for presser foot (%)   10-90   20   Adjustment for duty-cycle of AFL. Fine tuning can reduce the overheating.	P-41	_	10-990	50	The larger value the higher of foot-lifting (Noted: Not too high)
p-42 presser foot (%)  P-43 The time for the presser foot laying down (ms)  P-44 Presser foot protection (\$)  P-45 times (ms)  P-46 Suction when continuous feeding  P-48 Needle goes up as power on  P-49 Stitch (mm)  P-49 Stitch (mm)  P-50 Up needle position adjustment  Down needle position adjustment  P-50 Down needle position adjustment  D-40 The action time of presser foot laying down sequence.  Stop on the sewing the presser foot lifting, stop after trimming presser foot lifting, positive closing after heeling pedal for retention time.  Stop on the sewing the presser foot lifting, stop after trimming presser foot lifting, positive closing after heeling pedal for retention time.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.  Stop on the sewing the presser foot laying down sequence.					Adjustment for duty-cycle of AFL. Fine tuning can reduce the over-
P-43 foot laying down (ms)  P-44 Presser foot protection (s)  P-45 times (ms)  P-46 Suction when continuous feeding  P-48 Needle goes up as power on P-49  P-49 Stitch (mm)  P-40 Stitch (mm)  P-41 Stitch (mm)  P-42 Times (ms)  Down needle position adjustment  Down needle position adjustment  P-43 Stop on the sewing the presser foot lifting, stop after trimming presser foot lifting, positive closing after heeling pedal for retention time.  Stop on the sewing the presser foot lifting, stop after trimming presser foot lifting after heeling presser foot lifting, stop after trimming presser foot lifting after heeling	P-42		10-90	20	
P-44 Presser foot protection (s)  1-120 5 Stop on the sewing the presser foot lifting, stop after trimming presser foot lifting, positive closing after heeling pedal for retention time.  P-45 times (ms)  10-990 60 The longer time the large of the trimming force.  P-46 Suction when continuous feeding  P-48 Needle goes up as power on  P-49 Stitch (mm)  1-7 1 Adjustment same as actual needle distance by up and down key.  P-50 Up needle position adjustment  Down needle position adjustment  0-24 14 Same as P-72  Stime as P-73	P-43	The time for the presser	10-990	100	-
P-45 times (ms) 10-990 60 The longer time the large of the trimming force.  P-46 Suction when continuous feeding 0-2 0 0: No suction 1: Long suction 2: Synchronizer suction  P-48 Needle goes up as power on 0-1 1 0: OFF 1: ON  P-49 Stitch (mm) 1-7 1 Adjustment same as actual needle distance by up and down key.  P-50 Up needle position adjustment 0-24 4 Same as P-72  P-51 Down needle position adjustment 0-24 14 Same as P-73		, ,			Stop on the sewing the presser foot lifting, stop after trimming
P-45 times (ms) 10-990 60 The longer time the large of the trimming force.  P-46 Suction when continuous feeding 0-2 0 0: No suction 1: Long suction 2: Synchronizer suction  P-48 Needle goes up as power on 0-1 1 0: OFF 1: ON  P-49 Stitch (mm) 1-7 1 Adjustment same as actual needle distance by up and down key.  P-50 Up needle position adjustment 0-24 4 Same as P-72  Down needle position adjustment 0-24 14 Same as P-73	P-44	Presser foot protection (s)	1-120	5	
P-46 Suction when continuous feeding 0-2 0 0: No suction 1: Long suction 2: Synchronizer suction  P-48 Needle goes up as power on 0-1 1 0: OFF 1: ON  P-49 Stitch (mm) 1-7 1 Adjustment same as actual needle distance by up and down key.  P-50 Up needle position adjustment 0-24 4 Same as P-72  P-51 Down needle position adjustment 0-24 14 Same as P-73					
P-46 feeding 0-2 0 2: Synchronizer suction  P-48 Needle goes up as power on 0-1 1 0: OFF 1: ON  P-49 Stitch (mm) 1-7 1 Adjustment same as actual needle distance by up and down key.  P-50 Up needle position adjustment 0-24 4 Same as P-72  P-51 Down needle position adjustment 0-24 14 Same as P-73	P-45		10-990	60	
P-48 on 0-1 1 0: OFF 1: ON  P-49 Stitch (mm) 1-7 1 Adjustment same as actual needle distance by up and down key.  P-50 Up needle position adjustment 0-24 4 Same as P-72  P-51 Down needle position adjustment 0-24 14 Same as P-73	P-46	feeding	0-2	0	_
P-50 Up needle position adjustment 0-24 4 Same as P-72  P-51 Down needle position adjustment 0-24 14 Same as P-73	P-48		0-1	1	0: OFF 1: ON
P-50 adjustment 0-24 4 Same as P-72  P-51 Down needle position adjustment 0-24 14 Same as P-73	P-49	Stitch (mm)	1-7	1	Adjustment same as actual needle distance by up and down key.
P-51 adjustment 0-24 14 Same as P-73	P-50		0-24	4	Same as P-72
P-52 Test speed (r/min) 100-6000 2000 Adjustment by up and down key	P-51	_	0-24	14	Same as P-73
	P-52	Test speed (r/min)	100-6000	2000	Adjustment by up and down key

P-53	Test working time	1-250	20	Adjustment by up and down key	
	(×100ms)				
P-54	Test stop time (×100ms)	1-250	20	Adjustment by up and down key	
P-55	Item A testing: Continuous running	0-1	0	0: STOP 1: RUN	
P-56	Item B testing: With function running	0-1	0	0: STOP 1: RUN	
P-57	Item C testing: Without function running	0-1	0	0: STOP 1: RUN	
P-58	Machine plate protection switch	0-1	1	0: OFF 1: ON	
P-59	Presser foot protection switch	0-1	1	0: OFF 1: ON	
P-60	Electric /Air-powered	0-1	0	0: Electric 1: Air-powered	
P-62	Rotate direction	0-1	0	Through Hand-wheel direction: 0: Corotation (Clockwise) 1: Reversal (Counter clockwise)	
P-63	Language	0-2	1	0: English 1: Chinese 2: Turkish	
P-64	The strength of front sensor	0%-100%	80%	Adjustment front sensor strength	
P-65	The strength of mid-sensor	0%-100%	80%	Adjustment mid-sensor strength	
P-66	The strength of back sensor	0%-100%	80%	Adjustment back sensor strength	
P-67	The sensitivity of back sensor	0-700	375	In order to adapt different cloth material setting back-sensor receive strength.	
P <b>-</b> 69	Response time of back sensor (ms)	0-3000	0	Response time of back-sensor, when sewing such as mesh cloth can adjust this item, then can achieve you want effects.	
P-70	Model selection	0-1	0	0: Horizontal knife type 1: Side knife type	
P-72	Manually up positioning adjustment	0-24		Through hand-wheel direction, clockwise turn hand-wheel to up position, press [S] key to save the current value as up position just can fine-tuning.	
P-73	Manually down positioning adjustment	0-24		Through hand-wheel direction, clockwise turn hand-wheel to down position then press [S] key to save the current value as down position just can fine-tuning.	
P-74	Parameter reference	N1-N5		N1: Control box version N2: Panel version N3: rotationl speed N4: Pedal AD N5: drive version	
P-76	Code		0000		
P-78	Suction bucket type	0-2	0	0: With brush 1: Without brush 2: Valve	
	The needle bar shield				
P-80	protection switch	0-1	0	0: OFF 1: ON	

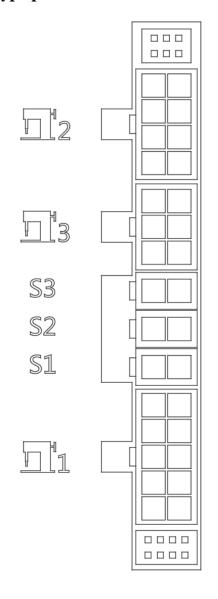


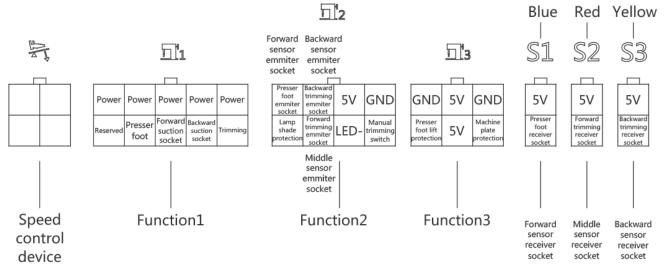
#### 4 Error Code List

Error Code	Problem description	Measure
E1	Over-voltage	Turn off the machine, check the power supply voltage.(Or whether exceed the rated voltage of use).  If there are still errors, please replace the control box and call for customer service.
E2	Low-voltage	Turn off the machine, check the power supply voltage.(Or whether under the rated voltage of use).  If there are still errors, please replace the control box and call for customer service.
E5	Pedal connection error	Turn off the machine, please check if the pedal in bad connection or is too loose. To get it right and turn on. If there are still errors, please replace the control box and call for customer service.
E7	Motor locked-rotor error	Turn the machine handwheel, check if it is stuck. If it is stuck, you have to rule out the mechanical failure.  If turn normal, check if the encoder and motor in bad connection or is too loose. If yes, please correct.  If connection well, check if the power supply voltage is abnormal or sewing speed is too high. If yes, please adjust.  If there are still errors, please replace the control box and call for customer service.
E10	Solenoid over-current	Turn off the machine, please check the related circuit is shorted or damaged.
E11	Positioning signal error	Turn off the machine, please check if the encoder in bad connection or is too loose. To get it right and turn on. If there are still errors, please replace the control box and call for customer service.
E14	Encoder error	Turn off the machine, please check if the encoder in bad connection or is too loose. To get it right and turn on. If there are still errors, please replace the control box and call for customer service.
E15	Power supply module abnormal over-current	Turn off the machine, then turn on again. If there are still errors, please replace the control box and call for customer service.
E16	Foot pressure safety switch is not in the correct position	Please check presser foot whether to return to correct position, the presser foot switch is damage or not, or socket is abnormal.
E17	Machine protection switch is not in the correct position	Turn off the machine, check if the machine is turn over, or the mercury switch is shifted or damaged.
E18	The needle bar shield protection switch not at the right position	Please kindly check the needle bar is open or not, needle shield protection switch is damaged or not, the plug is abnormal or not.
NC	Front operation panel linked to CPU interface had communication error	Please check the operation box and its connection. To get it right and turn on. If there are still errors, please replace the control box and call for customer service.

#### 5. Rear panel connector port outline diagram

#### 5.1 Electric machine type port





## GN7100D3



This machine may only be operated by adequately trained operators only after having completely read and understood the instruction manual.

Parts are subject to changes in design without prior notice.







#### **VETRON TYPICAL EUROPE GmbH**

Clara-Immerwahr-Str. 6 67661 Kaiserslautern, Germany Tel.: +49 6301 320 75-0

Fax: +49 6301 320 75-11

info@vetrontypical.com www.vetrontypical.com