

QD2623D 系列控制系统说明书

安全指示

- 1) 在安装或使用本产品前，使用者必须详细阅读本操作手册。
- 2) 本产品须由受过正确训练的人员来安装或操作。安装作业时必须关闭所有电源，切记不可带电操作。
- 3) 所有标有  符号的指示，必须特别注意并按照说明书上的执行，以免造成不必要的损害。
- 4) 为安全起见，禁止以延长线作电源座供应二项以上的电器产品使用。
- 5) 在连接电源线时，必须确定工作电压符合本产品标识中规定的额定电压值。
- 6) 请不要在日光直接照射的场所、室外及室温 45℃ 以上或 0℃ 以下的场所操作。
- 7) 请不要在暖气（电热器）旁、有露水的场所及在相对湿度 10% 以下或 90% 以上的场所操作。
- 8) 请不要在灰尘多的场所、具有腐蚀性物质的场所及有挥发性气体的场所操作。
- 9) 请注意所有电源线、信号线、接地线等接线时不要受压或过度扭曲，以确保使用安全。
- 10) 电源线的接地端须以适当大小的导线和接头连接到生产工厂的系统地线，此连接必须被永久固定。
- 11) 所有可转动的部分，必须以所提供的零件加以防范露出。
- 12) 在安装完成第一次通电后，先关闭切线功能以低速操作缝纫机并检查转动方向是否正确、运转是否稳定。
- 13) 在进行以下操作前，请先关闭所有电源：
 1. 在控制箱与马达上插拔任何连接插头时。
 2. 穿针线时。
 3. 翻抬缝纫机机头时。
 4. 修理或做任何机械上的调整时。
 5. 机器闲置不用时。
- 14) 修理或高层次的保养工作，仅能由受过训练的机电技师来执行。
所有维修用的零件，须由本公司提供认可，方可使用。
- 15) 使用本产品请远离高频电磁波和电波发射器等，以免所产生的电磁波干扰伺服驱动装置而发生误动作。
- 16) 请不要以不适当物体来敲击或撞击本产品及各装置。

保修期限

本产品保修期限为购买日期起一年内或出厂月份起两年内。

保修内容

本产品在正常情况使用且无人操作失误的前提下，于保修期间无偿为客户维修使能正常操作。

但以下情况于保修期间将收取维修费用：

1. 不当使用包括误接高压电源、将产品移做其它用途、自行拆卸、维修、更改、或不依规格范围使用、进水进油及插入异物于本产品。
2. 火灾、地震、闪电、风灾、水灾、盐蚀、潮湿、异常电压及其它天灾或不当场所造成的损害。
3. 客户购买后摔落本产品，或客户自行运输（或托付运输公司）造成的损害。

* 本产品在生产及测试上皆尽最大努力和严格控制使其达到高品质及高稳定的标准，但外部的电磁或静电干扰或不稳定的供应电源，仍可能对本产品造成影响或损害，因此操作场所的接地系统一定要确实做好，并建议用户安装故障安全防护装置（如漏电保护器）

1 按键说明

名称	按键	注明
功能参数编辑键	P	进入或退出功能参数的编辑。
参数查看保存键	S	对所选参数号内容进行查看和保存：选择好参数号后按此键可以进行查看和修改操作，修改参数值后按此键则退出并保存参数
上键		1、参数选择区内参数项递增键 2、参数内容区内设定数值递增键
下键		1、参数选择区内参数项递减键 2、参数内容区内设定数值递减键
机头灯亮度键		若点击，调节灯的亮度。
停针位键		若点击，切换缝制后机针的停止位置（上停针位/下停针位）。
恢复出厂设置键	RESET	在开机界面，长按 3S 后恢复出厂设置。

2 操作说明

2.1 恢复出厂设置

- 1.在关机状态下，同时按住上键和下键开机，再按 S 键确认即可恢复；
- 2.在开机界面，按 RESET 键 3 秒确认即可恢复

2.2 进入用户模式及修改保存

- 1.一般模式下按 P 键进入【用户参数区】。
- 2.按 S 键进入参数内容值；通过“上”、“下”键更改内容值，按 S 键保存。

2.3 进入技术员模式及修改保存

- 1.在关机状态，按住 P 键开机进入【技术员参数区】。
- 2.按 S 键进入参数内容值；通过“上”、“下”键更改内容值，按 S 键保存。

3 参数表

参数项	中文说明	范围	初始值	内容值名称说明与备注
P01	最高转速	200-5500	5000	车缝时的最高转速设定
P02	停针位选择	0-2	0	0：上停针；1：下停针；2：无定位
P03	慢速起缝开关	0-1	0	0：关 1：开
P04	慢速起缝速度	200-1500	400	
P05	慢速起缝针数	1-15	1	
P06	最低转速	200-500	200	车缝时的最低转速设定
P07	上定位调整	0-23		
P08	下定位调整	0-23		
P09	开机自动找上定位	0-1	1	0：开机不找上定位；1：开机找上定位
P11	加速曲线调整（%）	1-100	32	控速器的加速爬升斜率设定
P16	机头灯亮度	0-4	4	0：熄灭；1→4 亮度等级，数字越大亮度越大
P21	马达运转方向		0	0：顺时针
P22	测试模式速度	200-5000	3500	跑合速度的设置
P23	测试模式运行时间	1-250	20	跑合时间的设置
P24	测试模式停止时间	1-250	20	跑合停止的设置
P25	A 项测试	0-1	0	速度持续运行
P26	B 项测试	0-1	0	执行定位循环运行

参数项	中文说明	范围	初始值	内容值名称说明与备注
P29	吸气功能选择	0-2	1	0：关闭；1：吸气功能；2：半反踏气动抬压脚功能
P36	机型	1-15		
P40	信息显示			N01 电控版本号 N03 转速 N04 脚踏板 AD 值

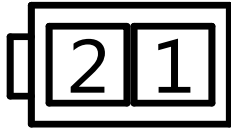
注：参数初始值仅供参考，实际参数值以实物为准。

4 错误代码表

错误码	内容	对策
E01	超电压	关闭系统电源，检测供应电源电压是否正确。（或是否超过使用规定的额定电压）。
E02	低电压	关闭系统电源，检测供应电源电压是否正确。（或是否低于使用规定的额定电压）。
E05	控速器接触异常	关闭系统电源，检查控速器接头是否松动或脱落，将其恢复正常后重启系统。
E07	电机堵转	转动机头手轮观察是否卡住。如卡住则先排除机械故障。 如转动正常，检查电机编码器接头和电机电源线接头是否松动。如有松动请修正。 如接触良好，检查供应电源电压是否异常或转速设置过高。如有请调整。
E09 E11	定位信号异常	关闭系统电源，检查电机编码器接口是否松动或脱落，将其恢复正常后重启系统。
E14	编码器信号异常	关闭系统电源，检查电机编码器接口是否松动或脱落，将其恢复正常后重启系统。
E15	电力模块不正常过流保护	关闭系统电源，再重新开启。

5 端口示意图

5.1 端口名称



衣车灯接插口：1（GND） 2（+5V）

 Safety Instruction

1. Users are required to read the operation manual completely and carefully before installation or operation.
2. All the instruction marked with sign  must be observed or executed; otherwise, bodily injuries might occur.
3. The product should be installed and pre-operated by well-trained persons.
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 matches the rated voltage indicated on the motor's name plate.
6. Don't operate in direct sun light, outdoors area and where the room temperature is over 45°C or below 5°C.
7. Please avoid operating near the heater at dew area or at the humidity below 30% or above 95%.
8. 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:
 - a) Connecting or disconnecting any connectors on the control box or motor.
 - b) Threading needle.
 - c) Raising the machine head.
 - d) Repairing or doing any mechanical adjustment.
 - e) Machines idling.
14. Repairs and high level maintenance work should only be carried out by electronic technicians with appropriate training.
15. All the spare parts for repair must be provided or approved by the manufacturer.
16. Don't use any objects or force 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 product can be damaged due to external magnetic interference and electronic static or noise or unstable power source more than expected; therefore the grounding system of operate area must guarantee the good earth and it's also recommended to install a failsafe device. (Such as residual current breaker)

1 Key Description

Name	Key	Indicate
Function Parameter Edit	P	Press this key to enter or exit function parameter edit mode.
Setting Parameter Check and Save	S	For the content of the selected parameters check and save: after select parameter press this key to check and modify operation, after modified parameter value press this key to exit and save the parameter.
On the Adjustment Key		1. Choose the region parameter items of incrementing key 2. Parameter setting value incrementing key
Under the Adjustment Key		1. Choose the region parameter items of diminishing key 2. Parameter setting value decrementing key
LED Brightness Adjustment		If click, it can adjust LED brightness.
Select the Shortcut Needle Position		If click, the needle stop position after shift the sewing mode (Up position / Down position).
Restore Factory	RESET	On the boot screen, long-press 3s can restore factory setting.

2 Operating Instructions

2.1 Reset the System

1. Under the shutdown state, hold on the “up” key and “down” key to boot, then double-click the S key to confirm it, shutdown restart.
2. On the boot screen, long-press “RESET” 3s can restore factory setting.

2.2 Enter the User Argument and Save Changes

1. Under normal mode, press key P enter to **【Use Parameter Area】**
2. Press S key enter to parameter content value; changed the value through “up” “down” key

2.3 Enter Technician Mode and Save Changes

1. In the shutdown state, hold on key P to turn on machine and enter **【Technical Parameter Area】**
2. Press S key enter to parameter content value, changed the value through “up” “down” key, and then press S key to save the value.

3 User Parameter

Parameters	Parameter Function	Range	Default	Description
P01	Maximum speed	200-5500	5000	Set the max sewing speed.
P02	Needle stop position selection	0-2	0	0: Needle up 1: Needle down 2: OFF
P03	Soft start switch	0-1	0	0: OFF 1: ON
P04	Soft start sewing speed	200-1500	400	
P05	Stitches number of soft start	1-15	1	
P06	Minimum speed	200-500	200	Set the minimum speed
P07	Up position adjustment	0-23	0	
P08	Down position adjustment	0-23	12	
P09	Needle goes up automatically as power turned on	0-1	1	0: No Function 1: Power turned on, needle goes up position automatically
P11	Speed curve adjustment (%)	1-100	32	The lager the value, the faster to increase speed
P16	Machine head lamp brightness	0-4	4	0: OFF 1→4: The brightness grade, the more value the more

Parameters	Parameter Function	Range	Default	Description
				brightness.
P21	Motor rotate direction		0	0: clockwise
P22	Auto running speed	200-5000	3500	Auto running speed setting
P23	Auto running time	1-250	20	
P24	Auto running stop time	1-250	20	
P25	Item A test	0-1	0	Continue running with constant speed
P26	Item B test	0-1	0	Carry out the set loop running
P29	Suction function selection	0-2	1	0: OFF 1: ON 2: Half anti-pedaling pneumatic foot lift presser function
P36	Type	1-15		
P40	Information display			N01 The control system version number N03 Speed N04 The pedal AD

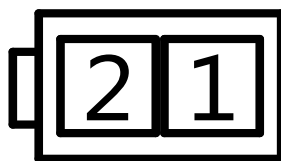
Note: the initial value of parameters is for reference only, and the actual value of parameters is subject to the real object.

4 Error Code List

Error Code	Problem description	Measure
E01	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.
E02	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.
E05	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.
E07	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.
E09 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.

5 Schematic Diagram of Port

5.1 Each Port Name



LED Lamp: 1(GND), 2(+5V)