

V420T / V430T / V460T Print & Apply System

User Manual

Bilingual Edition
中英对照版

English translation of the original Nmark document

V4X0BT

打印贴标机

使用说明

Nmark

V420T / V430T / V460T Print & Apply System

User Manual

English translation of the original Nmark document (cover title: V4X0BT).

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产品说明 顶贴、侧贴篇

本部分对顶贴、侧贴打印贴标机及其组件进行了简要说明。

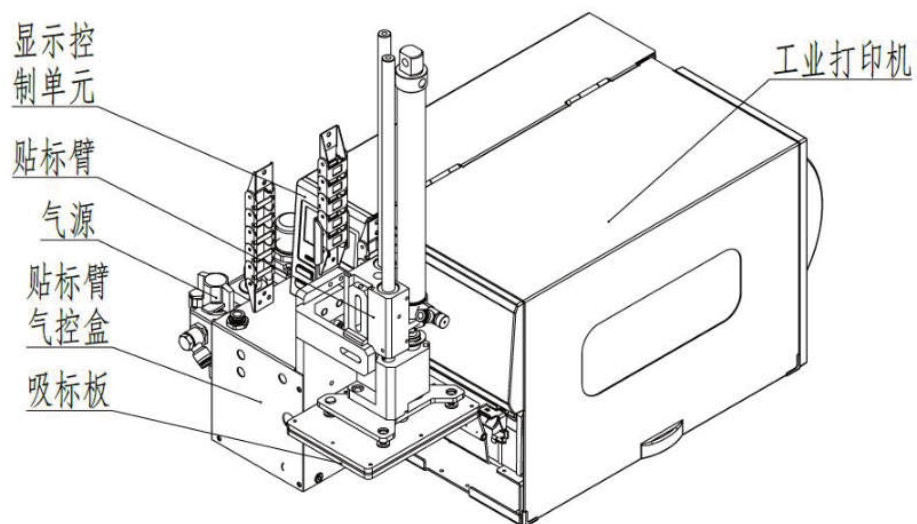
Top / Side Labeling Section

Product Description

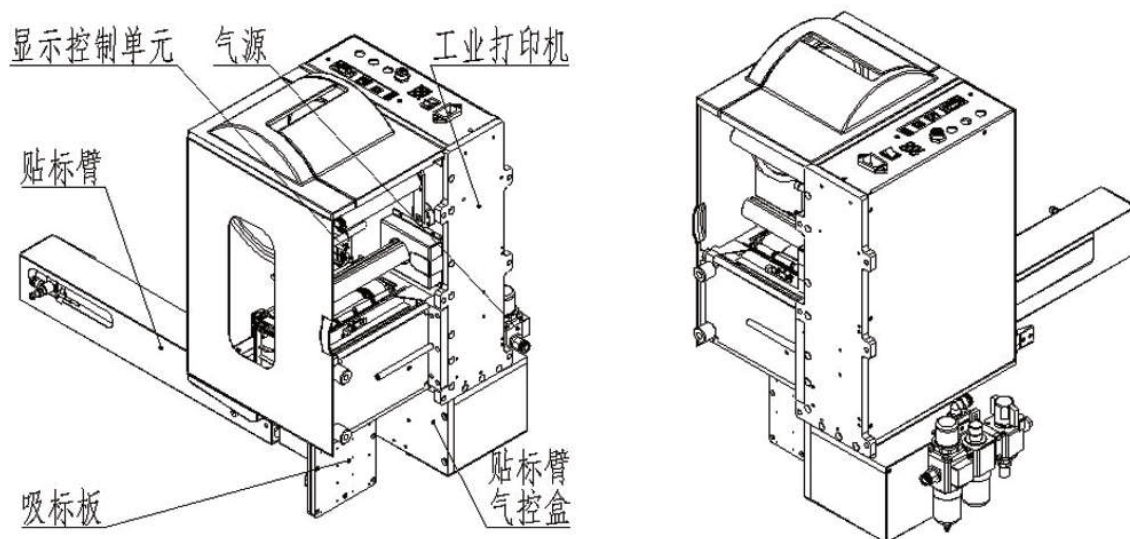
This section gives a brief description of the top-labeling and side-labeling print & apply system and its components.

顶贴、侧贴篇

顶贴整体结构



侧贴整体结构



Top / Side Labeling Section

Top-Labeling Overall Structure

Side-Labeling Overall Structure

Illustration/diagram page - see the original Chinese document for the image.

顶贴、侧贴篇

顶贴、侧贴性能指标

1. 顶贴或侧贴物品清单
 - 1.1 打标机
 - 1.2 贴标臂
 - 1.3 贴标板
2. 顶贴、侧贴打印性能
 - 2.1 打印模式：热转印/热敏
 - 2.2 分辨率：203dpi/306dpi/600dpi (V420BT/V430BT)
 - 2.3 标签尺寸：最大宽度110mm 最大长度200mm
 - 2.4 纸卷长度：180m
 - 2.5 色带长度：300m (V420BT/V430BT)
 - 2.6 打印速度：150mm每秒/125mm每秒 (V420BT/V430BT)
 - 2.7 最大打印宽度：104mm
 - 2.8 最大打印高度：400mm
3. 顶贴、侧贴标性能
 - 3.1 贴标臂种类：气缸
 - 3.2 贴标方式：拍压贴标
 - 3.3 贴标方向：垂直顶贴/侧贴
 - 3.4 标签尺寸：最大宽度110mm 最大长度200mm
 - 3.5 外部信号：

输入1：触发打印	输出1：打印完成
输入2：触发贴标	输出2：贴标完成
输入3：清除数据	输出3：故障报警
 - 3.6 指令控制：DIAGNOSTIC LABARM 105 1\r\n //启动打印
DIAGNOSTIC LABARM 105 2\r\n //启动贴标
 - 3.7 生产节拍：大于等于4 秒/张
 - 3.8 行程：0-90mm 需要更大行程，联系销售工程师进行确认
4. 顶贴、侧贴打印贴标软件
 - 4.1 标签编辑：NPL指令集
 - 4.2 数据来源：网口输入 USB输入 串口输入
 - 4.3 标签打印：用户自行发送标签打印数据到打印贴标机
 - 4.4 打印方式：windows电脑驱动打印
指令集控制打印
模板控制打印
5. 保修条款
 - 5.1 打印头保修30公里或三个月以先到达为准
 - 5.2 打印主机及贴标主体部分保修一年
 - 5.3 耗材除外
6. 需要的耗材
 - 6.1 碳带
 - 6.2 标签

Top / Side Labeling Specifications

1. Top / Side Labeling Item List

- 1.1 Marking machine (print engine)
- 1.2 Labeling arm
- 1.3 Labeling plate

2. Top / Side Labeling Printing Performance

- 2.1 Print mode: thermal transfer / direct thermal
- 2.2 Resolution: 203 dpi / 306 dpi / 600 dpi (V420BT / V430BT)
- 2.3 Label size: max width 110 mm, max length 200 mm
- 2.4 Media roll length: 180 m
- 2.5 Ribbon length: 300 m (V420BT / V430BT)
- 2.6 Print speed: 150 mm/s / 125 mm/s (V420BT / V430BT)
- 2.7 Max print width: 104 mm
- 2.8 Max print height: 400 mm

3. Top / Side Labeling Performance

- 3.1 Labeling arm type: pneumatic cylinder
- 3.2 Labeling method: tamp labeling
- 3.3 Labeling direction: vertical top labeling / side labeling
- 3.4 Label size: max width 110 mm, max length 200 mm
- 3.5 External signals: Input 1: trigger printing Output 1: print complete
Input 2: trigger labeling Output 2: labeling complete
Input 3: clear data Output 3: fault alarm
- 3.6 Command control:
DIAGNOSTIC LABARM 105 1\r\n // start printing
DIAGNOSTIC LABARM 105 2\r\n // start labeling
- 3.7 Production cycle: ≥ 4 s/label
- 3.8 Stroke: 0-90 mm. For a longer stroke, contact the sales engineer to confirm.

4. Top / Side Labeling Print & Apply Software

- 4.1 Label editing: NPL command set
- 4.2 Data source: network input, USB input, serial input
- 4.3 Label printing: the user sends the label print data to the print & apply system.
- 4.4 Printing method: Windows PC driver printing; command-set printing; template printing.

5. Warranty

- 5.1 Printhead warranty: 30 km or three months, whichever comes first.
- 5.2 Printer and labeling main body: one-year warranty.
- 5.3 Consumables are excluded.

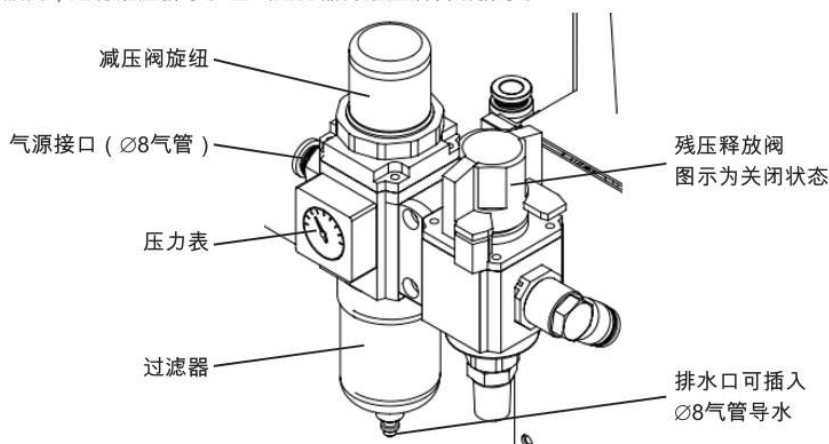
6. Required Consumables

- 6.1 Thermal transfer ribbon
- 6.2 Labels

顶贴、侧贴篇

顶贴与侧贴机使用及维护

- 1.设备使用AC220V电源。
- 2.使用气源压力0.8-1Mpa，气流量60L/min，气管径8毫米。
- 3.气源的接入及气源处理组件使用说明：
 - 1)初次安装在气源接口处插入外径8的气源供气管，调整压力表压力至0.4-0.5Mpa，保证真空发生器供给压力稳定。
 - 2)如需调整压力提起减压阀旋钮顺时针旋转增加压力，逆时针旋转为减小压力。调整完成后下压旋钮进行锁定。
 - 3)图中残压释放阀处于关闭状态，下压旋钮且顺时针旋转90度贴标机接通气源，此时吸标板上升至吸标位置。（注意：打开残压阀吸标板会上升，关闭残压阀吸标板会下落，注意刮碰。避免损坏设备及刮碰人员！）
 - 4)气源处理组件需每日检查空气过滤器中的水，如果过滤器中的水满了，关闭主供气气源，关闭残压释放阀，进行泄压排水。空气过滤器为泄压后自动排水。



- 4.定期保养气泵，排水排油。保证气源洁净、含水量不可过高。
- 5.初次使用检查吸纸板高度与剥离片之间高度0mm~1.5mm之间进行调整，前后间隙2.5-5mm，调整后关闭气源手动升降吸标板看是否刮碰剥离片以免损坏元件。调整左右间隙时，松开L块的固定螺钉，前后滑移L块调整至需要位置再锁紧螺钉。调整上下高度时，松开滑动块固定的两个螺钉，旋转上方调整螺钉，逆时针旋转贴标板向下移动，顺时针贴标板向上移动。见示意图。

Top / Side Labeling Machine Use & Maintenance

1. The equipment uses AC 220 V power.
2. Use air supply pressure 0.8-1 MPa, air flow 60 L/min, tube diameter 8 mm.
3. Air supply connection and air treatment unit instructions:
 - 1) For first-time installation, insert an 8 mm outer-diameter air supply tube into the air supply port and adjust the pressure gauge to 0.4-0.5 MPa to ensure a stable supply to the vacuum generator.
 - 2) To adjust the pressure, lift the pressure reducing valve knob and rotate clockwise to increase pressure, counterclockwise to decrease it. After adjustment, press the knob down to lock.
 - 3) In the figure the residual pressure release valve is in the closed state. Press the knob down and rotate it 90 degrees clockwise to connect the air supply to the labeling machine; the label pickup plate then rises to the pickup position. (Note: opening the residual pressure valve raises the label pickup plate and closing it lowers the plate - watch for collisions to avoid damaging the equipment or injuring personnel!)
 - 4) Check the water in the air filter every day. If the filter is full of water, close the main air supply, close the residual pressure release valve, then release pressure and drain. The air filter drains automatically after the pressure is released.
4. Perform regular maintenance on the air pump - drain water and oil - to keep the air supply clean and not excessively humid.
5. For first-time use, check the height between the label pickup plate and the peel-off plate (adjust to 0-1.5 mm) and the front/rear gap (2.5-5 mm). After adjustment, close the air supply and move the label pickup plate up and down manually to confirm it does not scrape the peel-off plate, so as to avoid damaging components. To adjust the left/right gap, loosen the fixing screw of the L-block, slide the L-block to the required position, then tighten the screw. To adjust the up/down height, loosen the two screws fixing the sliding block and rotate the upper adjusting screw - counterclockwise moves the labeling plate down, clockwise moves the label pickup plate up. See the diagram.

Pressure reducing valve knob

Air supply port (8 mm tube)

Pressure gauge

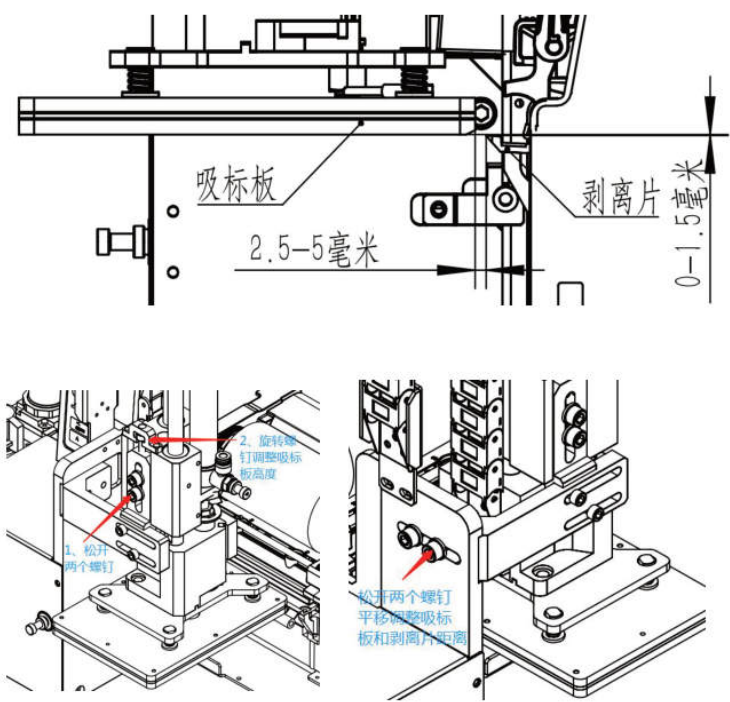
Residual pressure release valve

Shown in closed state

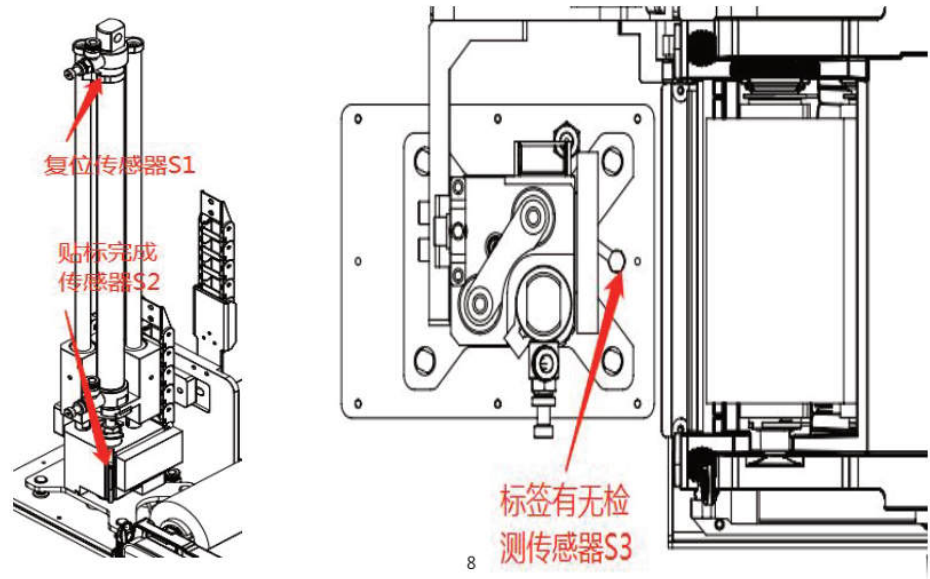
Drain port (insert 8 mm tube to drain water)

Filter

顶贴、侧贴篇



- 6、初次6、使用，通电、通气开机后检查复位传感器S1、贴标完成传感器S2及标签有无检测传感器S3传感器是否正常工作。复位传感器S1通电、通气、开机后处于常亮状态。标签有无检测传感器S3打印走纸过程中剥离开标签对其遮挡其放大器控制盒会有红绿双灯亮起。贴标完成传感器S2在接触物体时会亮起，触发后贴标臂会缩回。
- 注：若复位传感器异常，贴标时会报错S1。
- 通常未完成正常贴标通常会报错S2。



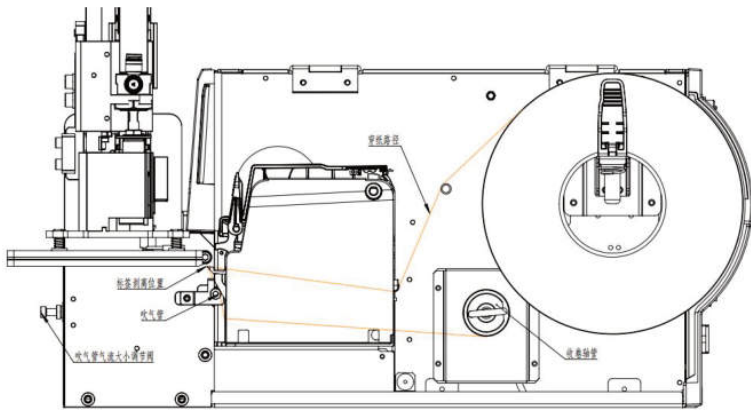
Top / Side Labeling Section

6. On first use, after powering on and connecting the air supply, check whether the home sensor S1, the label-applied sensor S2 and the label-presence sensor S3 work correctly. After power-on and air connection, the home sensor S1 stays lit. During print media feed, when a peeled label blocks the label-presence sensor S3, both the red and green LEDs of its amplifier control box light up. The label-applied sensor S2 lights up when it contacts an object; after triggering, the labeling arm retracts.

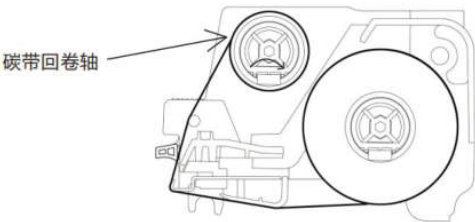
Note: if the home sensor is faulty, the machine reports error S1 when labeling. If labeling is not completed normally, it usually reports error S2.

顶贴、侧贴篇

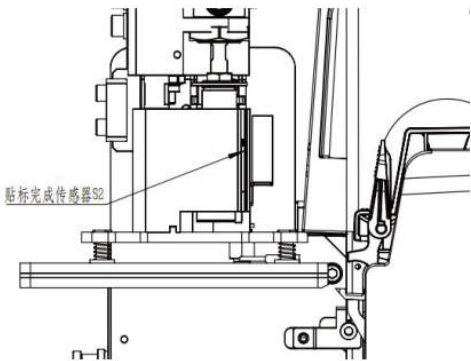
7、使用时注意穿纸位置及方法。如图示意穿纸路径，只有正确穿纸才不会影响正常工作。例如纸张如果穿到吹气管前面挡住吹气孔打印时标签会掉落。



8、碳带安装路径：



9、(如下图位置) 贴标时检查贴标完成传感器S2在触碰贴标物体时是否亮灯。贴标时下方无物体时贴标臂会下落到最大行程处停止，保持一小段时间 (5s) 会自动缩回，此时会提示贴标臂错误S2报警。



10、使用时贴标板未接触到贴标物体，纸张即脱离吸标板气缸会回缩并提示贴标臂错误S2报警。(参考常见故障排除中'贴标臂错误S2'解决。)

Top / Side Labeling Section

7. Pay attention to the media threading position and method during use. Thread the media along the path shown in the diagram - only correct threading will not affect normal operation. For example, if the media is threaded in front of the blow tube and blocks the blow hole, the label will drop during printing.

8. Ribbon installation path:

9. (Position as shown in the figure.) When labeling, check whether the label-applied sensor S2 lights up when it touches the labeling object. When there is no object below, the labeling arm descends to the end of its stroke and stops, holds for a short time (5 s), then retracts automatically, and the machine reports a labeling arm error S2 alarm.

10. During use, if the labeling plate does not contact the labeling object and the label leaves the label pickup plate, the cylinder retracts and reports a labeling arm error S2 alarm. (See 'Labeling arm error S2' in Common Fault Troubleshooting.)

顶贴、侧贴篇

- 11、吹气气流量大小对贴标的影响：气流量过大或吹气角度不适合时，会产生把纸吹跑现象，气流量过小或吹气角度不适合时会产生标签不贴合吸标板掉落现象。一般观察调节吹气气流大小，使得被剥离的标签贴合在吸标板面上走到吸标板下方较好。
- 12、注明：使用前检查事项同样适用日常工作中故障检查。
- 13、遇到电磁阀、真空发生器电气、机械故障时需打开护罩检查时，建议联系售后服务。
- 14、贴标机必须按要求固定，否则会造成贴标机被顶起从而发生危险。

顶贴、侧贴常见故障排除

故障现象	解决办法
1 标签无法吸附在吸纸板上	标签安装过程中，挡住了吹气管，参考上述第7项解决此故障。
2 如果打印过程中一直贴的位置及打印位置不准确	关闭打印机，按住feed按键，并机，当报错指示灯闪烁松手，打印机自动校验纸张，当打印机停止，校验成功。打印观察打印位置及粘贴位置是否准确。
3 显示屏提示贴标臂错误	按下FEED按键即可消除此错误。 检查对应传感器S1，S2，S3。参考上文第8、9、10条。 如依旧未解决，联系厂家进行处理。
4 色带错误	多按几下FEED按键即可消除此错误。 安装时，收紧色带，不可留余太多。
5 色带缺失	如色带已用尽，更换新的色带。 检查打印参数配置，打印方式有碳带应该选择热转。
6 无法正常开机	1.检查电源供电是否正常，是否符合220V供电要求。 2.如供电正常仍无法开机，请联系厂家进行处理。
7 打印效果差	1.调节打印浓度或打印速度。 2.打印头脏：清洁打印头。
8 点缺失	1.打印头脏：清洁打印头。 2.打印头损坏：关闭打印机，联系售后进行处理。
9 贴标臂错误S2	1.贴标完成传感器S2放大器控制盒灯常亮。 2.贴标完成传感器S2安装位置偏上或者偏下。 3.贴标臂是否推动标签接触物体、粘贴到物体表面并返回。

Top / Side Labeling Common Fault Troubleshooting

Fault symptom / Solution

1. The label cannot be held on the label pickup plate.
The blow tube is blocked during label installation; refer to item 7 above to resolve this fault.
2. The labeling position / print position is inaccurate during printing.
Turn off the printer, hold the FEED key and power on; release it when the error indicator flashes. The printer calibrates the media automatically; when it stops, calibration is complete. Print and check whether the print position and apply position are accurate.
3. The display shows a labeling arm error.
Press the FEED key to clear this error. Check the corresponding sensors S1, S2 and S3; refer to items 8, 9 and 10 above. If still unresolved, contact the manufacturer.
4. Ribbon error.
Press the FEED key a few times to clear this error. When installing, tighten the ribbon and do not leave too much slack.
5. Ribbon missing.
If the ribbon is used up, replace it with a new one. Check the print parameter settings; when a ribbon is used, thermal transfer must be selected.
6. The machine cannot be powered on.
1. Check whether the power supply is normal and meets the 220 V supply requirement. 2. If the supply is normal but it still cannot power on, contact the manufacturer.
7. Poor print quality.
1. Adjust the print darkness or print speed. 2. Dirty printhead: clean the printhead.
8. Missing dots.
1. Dirty printhead: clean the printhead. 2. Damaged printhead: power off the printer and contact after-sales service.
9. Labeling arm error S2.
1. The label-applied sensor S2 amplifier control box LED stays lit. 2. The label-applied sensor S2 is mounted too high or too low. 3. Check whether the labeling arm pushes the label to contact the object, applies it to the surface and returns.

Additional Notes

11. Effect of blow air flow on labeling: if the air flow is too high or the blow angle is unsuitable, the label may be blown away; if the air flow is too low or the blow angle is unsuitable, the label may not stick to the label pickup plate and drop. Generally, observe and adjust the blow air flow so that the peeled label stays on the label pickup plate and travels to the lower part of the plate.
12. Note: the pre-use checks also apply to fault inspection in daily work.
13. For electrical/mechanical faults such as a solenoid valve or vacuum generator that require opening the cover for inspection, contact after-sales service.
14. The labeling machine must be fixed as required; otherwise it may be lifted up and cause danger.

刮贴篇

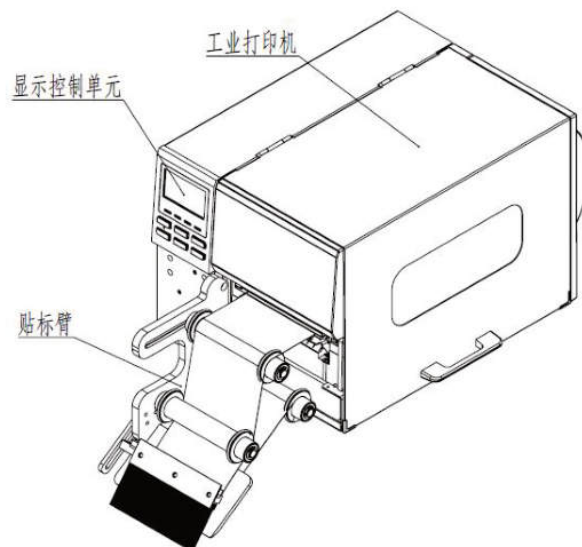
本部分对刮贴打印贴标机及其组件进行了简要说明。

Scrape Labeling Section

This section gives a brief description of the scrape-labeling print & apply system and its components.

刮贴篇

刮贴机整体结构



刮贴机性能指标

1. 物品清单
 - 1.1 打标机
 - 1.2 贴标臂
2. 刮贴机打印性能
 - 2.1 打印模式：热转印/热敏
 - 2.2 分辨率：203dpi/306dpi (V420BT/V430BT)
 - 2.3 标签尺寸：最大宽度110mm 最大长度200mm
 - 2.4 纸卷长度：180m
 - 2.5 色带长度：300m/300m (V420BT/V430BT)
 - 2.6 打印速度：150mm每秒/125mm每秒 (V420BT/V430BT)
 - 2.7 最大打印宽度：104mm
 - 2.8 最大打印高度：400mm
3. 刮贴机贴标性能
 - 3.1 贴标方式：刮贴
 - 3.2 贴标方向：水平
 - 3.3 标签尺寸：最大宽度110mm 最大长度200mm
 - 3.4 外部信号：

输入1：触发打印	输出1：打印完成
输入2：触发贴标	输出2：贴标完成
输入3：清除数据	输出3：故障报警
4. 刮贴机打印贴标软件
 - 4.1 标签编辑：NPL指令集
 - 4.2 数据来源：网口输入 USB输入 串口输入
 - 4.3 标签打印：用户自行发送标签打印数据到打印贴标机
 - 4.4 打印方式：windows电脑驱动打印
指令集控制打印
模板控制打印
5. 保修条款
 - 5.1 打印头保修30公里或三个月以先到达为准
 - 5.2 打印主机及贴标主体部分保修一年
 - 5.3 耗材除外
6. 需要的耗材
 - 6.1 碳带
 - 6.2 标签

Scrape Labeling Machine Specifications

Scrape Labeling Machine Overall Structure

1. Item List

- 1.1 Marking machine (print engine)
- 1.2 Labeling arm

2. Scrape Labeling Printing Performance

- 2.1 Print mode: thermal transfer / direct thermal
- 2.2 Resolution: 203 dpi / 306 dpi (V420BT / V430BT)
- 2.3 Label size: max width 110 mm, max length 200 mm
- 2.4 Media roll length: 180 m
- 2.5 Ribbon length: 300 m / 300 m (V420BT / V430BT)
- 2.6 Print speed: 150 mm/s / 125 mm/s (V420BT / V430BT)
- 2.7 Max print width: 104 mm
- 2.8 Max print height: 400 mm

3. Scrape Labeling Performance

- 3.1 Labeling method: scrape labeling
- 3.2 Labeling direction: horizontal
- 3.3 Label size: max width 110 mm, max length 200 mm
- 3.4 External signals: Input 1: trigger printing Output 1: print complete
Input 2: trigger labeling Output 2: labeling complete
Input 3: clear data Output 3: fault alarm

4. Scrape Labeling Print & Apply Software

- 4.1 Label editing: NPL command set
- 4.2 Data source: network input, USB input, serial input
- 4.3 Label printing: the user sends the label print data to the print & apply system.
- 4.4 Printing method: Windows PC driver printing; command-set printing; template printing.

5. Warranty

- 5.1 Printhead warranty: 30 km or three months, whichever comes first.
- 5.2 Printer and labeling main body: one-year warranty.
- 5.3 Consumables are excluded.

6. Required Consumables

- 6.1 Thermal transfer ribbon
- 6.2 Labels

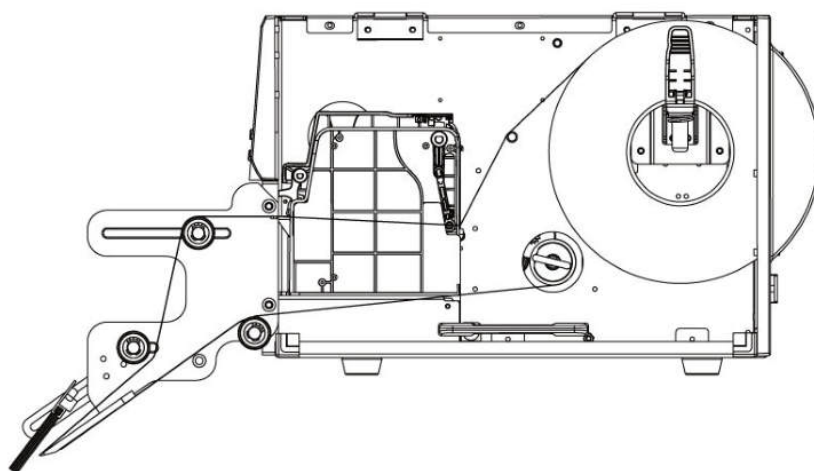
刮贴篇

刮贴机使用及维护

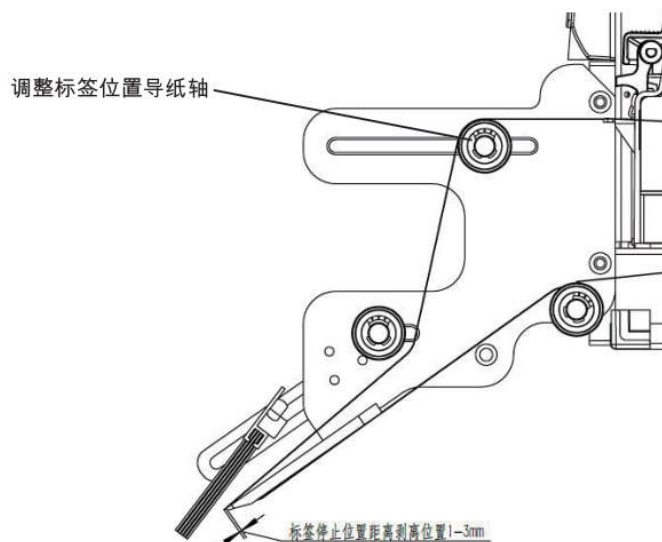
1.设备使用AC220V电源。

2.初次使用设置：

- 1) 设置打印参数标签大小与实际标签相符(宽度及高度)：菜单—打印参数—标签高度(标签宽度)
- 2) 如图安装标签纸



- 3) 初次测试：触发打印传感器插于后部面板打印信号接口，按键：菜单—贴标臂—参数—脱机模式(出厂默认打印使能开启)，遮挡传感器进行贴标走纸，贴几次标签，标签停留位置稳定后需进行标签停止位置调整。注意每次剥离开的标签及时取走避免粘贴到其它物体上。
- 4) 标签停止位置调整：前后调整导纸轴使得标签停止位置距离剥离位置1-3mm，或根据实际需要调整，剥离片下部距离被贴物体尽量近1-5mm为宜。



3.刮贴机配合生产线使用打印速度为2-6即50-150mm/s,打印速度要大于生产线传送速度。

Scrape Labeling Machine Use & Maintenance

1. The equipment uses AC 220 V power.
2. First-time setup:
 - 1) Set the print parameter label size to match the actual label (width and height): Menu > Print Parameters > Label Height (Label Width).
 - 2) Install the label stock as shown in the figure.
 - 3) Initial test: plug the print trigger sensor into the print signal port on the rear panel. Keys: Menu > Labeling Arm > Parameters > Offline mode (factory default print enable is on). Block the sensor to feed media and apply several labels. After the label stop position stabilizes, adjust the label stop position. Note: remove each peeled label promptly to avoid it sticking to other objects.
 - 4) Label stop position adjustment: adjust the media guide roller forward or backward so that the label stop position is 1-3 mm from the peel-off position, or as actually required. Keep the lower part of the peel-off plate as close as practical (1-5 mm) to the object being labeled.
Media guide roller for adjusting the label position
3. When the scrape labeling machine is used together with a production line, set the print speed to 2-6 (50-150 mm/s); the print speed must be greater than the line conveyor speed.

电动贴篇

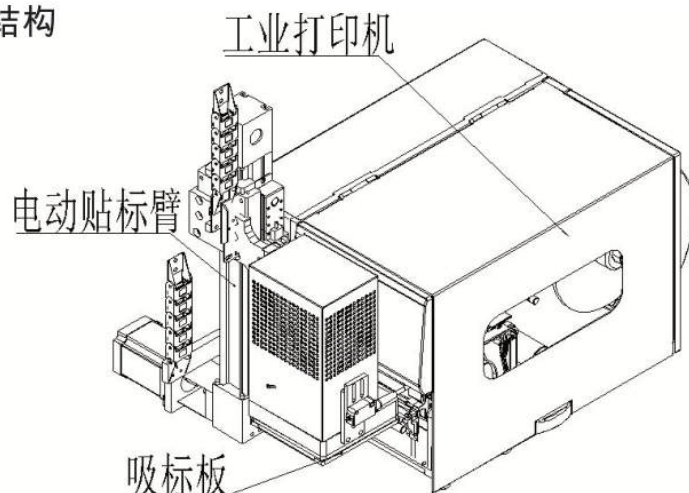
本部分对电动贴打印贴标机及其组件进行了简要说明。

Electric Labeling Section

This section gives a brief description of the electric-labeling print & apply system and its components.

电动贴篇

电动贴标机整体结构



电动贴标机性能指标

- 1.物品清单
 - 1.1 打标机
 - 1.2 贴标臂
- 2.电动贴标机打印性能
 - 2.1 打印模式：热转印/热敏
 - 2.2 分辨率：203dpi/306dpi (V420BT/V430BT)
 - 2.3 标签尺寸：最大宽度110mm 最大长度200mm
 - 2.4 纸卷长度：180m
 - 2.5 色带长度：300m/300m (V420BT/V430BT)
 - 2.6 打印速度：150mm每秒/125mm每秒 (V420BT/V430BT)
 - 2.7 最大打印宽度：104mm
 - 2.8 最大打印高度：150mm
- 3.电动贴标机贴标性能
 - 3.1 贴标方式：电动贴
 - 3.2 贴标方向：水平
 - 3.3 标签尺寸：最大宽度110mm 最大长度200mm
 - 3.4 外部信号：

输入1：触发打印	输出1：打印完成
输入2：触发贴标	输出2：贴标完成
输入3：清除数据	输出3：故障报警
- 4.电动贴标机打印贴标软件
 - 4.1 标签编辑：NPL指令集
 - 4.2 数据来源：网口输入 USB输入 串口输入
 - 4.3 标签打印：用户自行发送标签打印数据到打印贴标机
 - 4.4 打印方式：windows电脑驱动打印
指令集控制打印
模板控制打印
- 5.保修条款
 - 5.1 打印头保修30公里或三个月以先到达为准
 - 5.2 打印主机及贴标主体部分保修一年
 - 5.3 耗材除外
- 6.需要的耗材
 - 6.1 碳带
 - 6.2 标签

Electric Labeling Machine Specifications

Electric Labeling Machine Overall Structure

1. Item List

- 1.1 Marking machine (print engine)
- 1.2 Labeling arm

2. Electric Labeling Printing Performance

- 2.1 Print mode: thermal transfer / direct thermal
- 2.2 Resolution: 203 dpi / 306 dpi (V420BT / V430BT)
- 2.3 Label size: max width 110 mm, max length 200 mm
- 2.4 Media roll length: 180 m
- 2.5 Ribbon length: 300 m / 300 m (V420BT / V430BT)
- 2.6 Print speed: 150 mm/s / 125 mm/s (V420BT / V430BT)
- 2.7 Max print width: 104 mm
- 2.8 Max print height: 150 mm

3. Electric Labeling Performance

- 3.1 Labeling method: electric labeling
- 3.2 Labeling direction: horizontal
- 3.3 Label size: max width 110 mm, max length 200 mm
- 3.4 External signals: Input 1: trigger printing Output 1: print complete
Input 2: trigger labeling Output 2: labeling complete
Input 3: clear data Output 3: fault alarm

4. Electric Labeling Print & Apply Software

- 4.1 Label editing: NPL command set
- 4.2 Data source: network input, USB input, serial input
- 4.3 Label printing: the user sends the label print data to the print & apply system.
- 4.4 Printing method: Windows PC driver printing; command-set printing; template printing.

5. Warranty

- 5.1 Printhead warranty: 30 km or three months, whichever comes first.
- 5.2 Printer and labeling main body: one-year warranty.
- 5.3 Consumables are excluded.

6. Required Consumables

- 6.1 Thermal transfer ribbon
- 6.2 Labels

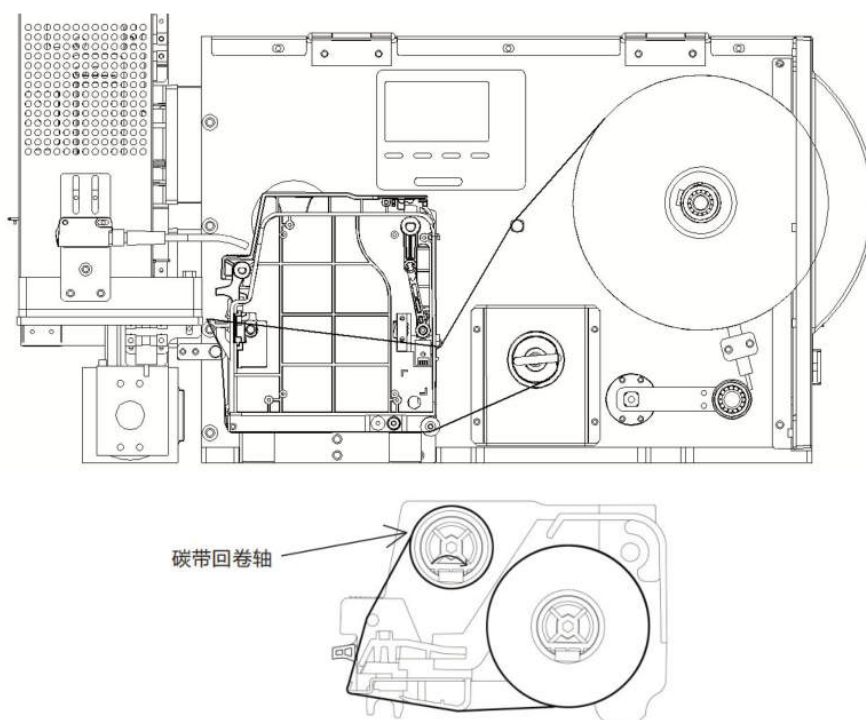
电动贴篇

电动贴标机使用及维护

1.设备使用AC220V电源。

2.初次使用设置：

- 1) 设置打印参数标签大小与实际标签相符（宽度及高度）：菜单—3打印参数—标签高度（标签宽度）
- 2) 安装标签纸及碳带



- 3) 初次测试：开机贴标臂自动寻位，吸标板停于待吸标位置。
显示屏操作：主菜单 - 8贴标臂 - 单次测试模式，每按一次贴标一次。

3.常见问题说明：

- 1) 物体检测传感器未检测到物体，贴标臂自动下降到最底端，测试模式按菜单/确认键消除报警，数据打印模式按清除/返回键消除报警。检查并取走贴标失败标签。
- 2) 物体检测传感器未检测到物体，贴标臂下降到吸标板接触到物体，设备报警，电机会有异常声响，短暂停留后贴标臂返回待接标位置并报警，测试模式按菜单/确认键消除报警，数据打印模式按清除/返回键消除报警。检查并取走贴标失败标签。
- 3) 更换碳带、更换标签纸、即进行打印头抬起操作，此时会造成前两个标签打印位置不准确，打印贴标失败时要及时清理未贴标标签，并进行消错报警处理。

Electric Labeling Machine Use & Maintenance

1. The equipment uses AC 220 V power.
2. First-time setup:
 - 1) Set the print parameter label size to match the actual label (width and height): Menu > 3 Print Parameters > Label Height (Label Width).
 - 2) Install the label stock and the ribbon.
 - 1) If the object detection sensor does not detect an object, the labeling arm descends to the bottom. In test mode press the Menu/OK key to clear the alarm; in data print mode press the Clear/Return key to clear it. Check and remove the failed label.
 - 2) If the object detection sensor does not detect an object and the labeling arm descends until the label pickup plate contacts the object, the equipment alarms; the motor may make an abnormal sound, and after a brief pause the labeling arm returns to the label-receiving position and alarms. In test mode press Menu/OK to clear the alarm; in data print mode press Clear/Return to clear it. Check and remove the failed label.
 - 3) When replacing the ribbon or the label stock (which requires lifting the printhead), the first two labels may print at an inaccurate position. When printing/labeling fails, remove the unlabeled labels promptly and clear the alarm.
 - 3) Initial test: on power-up the labeling arm homes automatically and the label pickup plate stops at the label-receiving position. Display operation: Main Menu > 8 Labeling Arm > Single Test mode; each press applies one label.
3. Common problem notes:

RFID贴标机篇

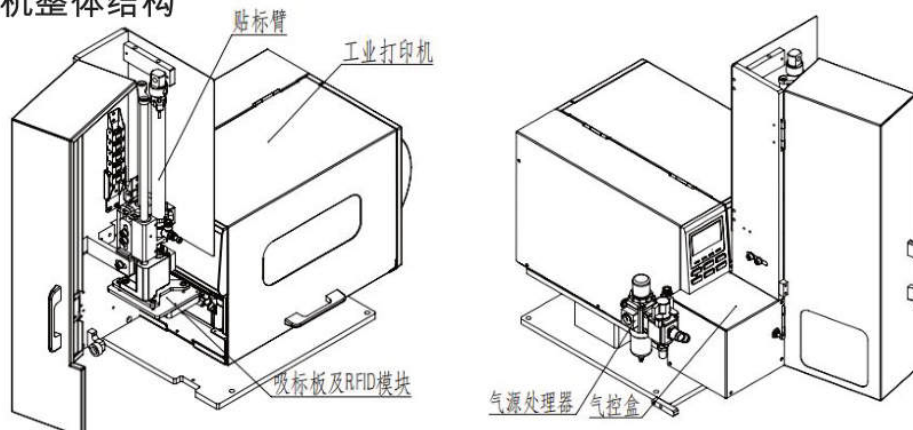
本部分对RFID打印贴标机及其组件进行了简要说明。

RFID Labeling Section

This section gives a brief description of the RFID print & apply system and its components.

RFID贴标机篇

RFID贴标机整体结构



RFID贴标机性能指标

- 1.顶贴或侧贴物品清单
 - 1.1 打标机
 - 1.2 贴标臂
 - 1.3 吸标板及RFID模块
- 2.RFID贴标机打印性能
 - 2.1 打印模式：热转印/热敏
 - 2.2 分辨率：203dpi/306dpi (V420BT/V430BT)
 - 2.3 标签尺寸：最大宽度110mm 最大长度200mm
 - 2.4 纸卷长度：180m
 - 2.5 色带长度：300m/300m (V420BT/V430BT)
 - 2.6 打印速度：100mm每秒/100mm每秒 (V420BT/V430BT)
 - 2.7 最大打印宽度：104mm
 - 2.8 最大打印高度：25mm
- 3.顶贴、侧贴标性能
 - 3.1 贴标臂种类：气缸
 - 3.2 贴标方式：拍压贴标
 - 3.3 贴标方向：垂直顶贴
 - 3.4 标签尺寸：最大宽度110mm 最大长度25mm
 - 3.5 外部信号：

输入1：触发打印	输出1：打印完成
输入2：触发贴标	输出2：贴标完成
输入3：清除数据	输出3：故障报警
 - 3.6 指令控制：DIAGNOSTIC LABARM 105 1\r\n //启动打印
DIAGNOSTIC LABARM 105 2\r\n //启动贴标
 - 3.7 生产节拍：大于等于4秒/张
- 4.RFID贴标机打印贴标软件
 - 4.1 标签编辑：NPL指令集
 - 4.2 数据来源：网口输入 USB输入 串口输入
 - 4.3 标签打印：用户自行发送标签打印数据到打印贴标机
 - 4.4 打印方式：windows电脑驱动打印
指令集控制打印
模板控制打印
- 5.保修条款
 - 5.1 打印头保修30公里或三个月以先到达为准
 - 5.2 打印主机及贴标主体部分保修一年
 - 5.3 耗材除外
- 6.需要的耗材
 - 6.1 碳带
 - 6.2 标签

RFID Labeling Machine Specifications

RFID Labeling Machine Overall Structure

1. Top / Side Labeling Item List

- 1.1 Marking machine (print engine)
- 1.2 Labeling arm
- 1.3 Label pickup plate and RFID module

2. RFID Printing Performance

- 2.1 Print mode: thermal transfer / direct thermal
- 2.2 Resolution: 203 dpi / 306 dpi (V420BT / V430BT)
- 2.3 Label size: max width 110 mm, max length 200 mm
- 2.4 Media roll length: 180 m
- 2.5 Ribbon length: 300 m / 300 m (V420BT / V430BT)
- 2.6 Print speed: 100 mm/s / 100 mm/s (V420BT / V430BT)
- 2.7 Max print width: 104 mm
- 2.8 Max print height: 25 mm

3. Top / Side Labeling Performance

- 3.1 Labeling arm type: pneumatic cylinder
- 3.2 Labeling method: tamp labeling
- 3.3 Labeling direction: vertical top labeling
- 3.4 Label size: max width 110 mm, max length 25 mm
- 3.5 External signals: Input 1: trigger printing Output 1: print complete
Input 2: trigger labeling Output 2: labeling complete
Input 3: clear data Output 3: fault alarm
- 3.6 Command control:
DIAGNOSTIC LABARM 105 1\r\n // start printing
DIAGNOSTIC LABARM 105 2\r\n // start labeling
- 3.7 Production cycle: ≥ 4 s/label

4. RFID Print & Apply Software

- 4.1 Label editing: NPL command set
- 4.2 Data source: network input, USB input, serial input
- 4.3 Label printing: the user sends the label print data to the print & apply system.
- 4.4 Printing method: Windows PC driver printing; command-set printing; template printing.

5. Warranty

- 5.1 Printhead warranty: 30 km or three months, whichever comes first.
- 5.2 Printer and labeling main body: one-year warranty.
- 5.3 Consumables are excluded.

6. Required Consumables

- 6.1 Thermal transfer ribbon
- 6.2 Labels

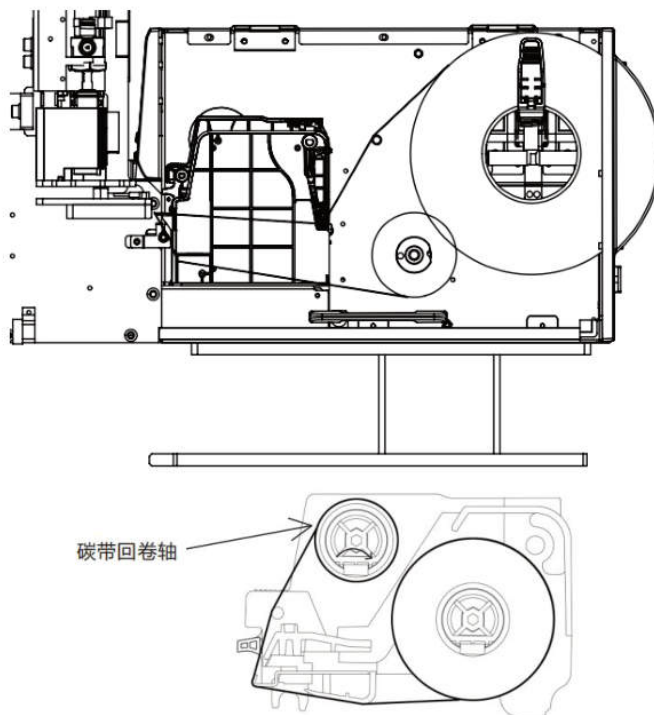
RFID贴标机篇

RFID贴标机使用及维护

1.设备使用AC220V电源。

2.初次使用设置：

- 1) 检查及设置打印参数标签大小与实际标签相符 (宽度及高度)：菜单—3打印参数—标签高度 (标签宽度)
- 2) 安装标签纸及碳带



3) 贴标测试：

1、纸张校验：

按屏幕下方feed/走纸键两次或多次，每次要及时拿掉走出的标签，待标签停止位置稳定后（即传感器已经确认走纸长度），可以进行贴标测试。（每次更换色带、更换标签纸，打印头抬起操作时都要进行走纸操作，保证贴标时传感器已校准，确保数据贴标时出标位置准确）

2、贴标测试：

显示屏操作：主菜单—8贴标臂—单次测试模式，每按一次贴标一次。

3、RFID读写贴标测试：

电脑使用调试助手，按照指令集编辑好内容，设置机器ip及端口，默认为192.168.1.69，端口9100，网络连接打印机，点击发送即按所发内用进行打印及写入。

4、RFID读写测试内容显示：

主菜单—7 RFID—RFID写，使用调试助手发送打印数据时就会显示写入内容。

3.常见问题说明：

- 1) 标签读取失败，启动打印后标签停吸在吸标板上一定时间为被读取到就会报错；
- 2) 贴标臂下落时标签未能跟随吸标板下落，此时报错贴标失败；
- 3) 更换碳带、更换标签纸注意正确，一定校验纸张后进行贴标。否则会导致贴标失败。

RFID Labeling Machine Use & Maintenance

1. The equipment uses AC 220 V power.
 2. First-time setup:
 - 1) Check and set the print parameter label size to match the actual label (width and height): Menu > 3 Print Parameters > Label Height (Label Width).
 - 2) Install the label stock and the ribbon.
 - 3) Labeling test:
 1. Media calibration: press the FEED / media-feed key below the screen twice or more, removing each fed label promptly. After the label stop position stabilizes (i.e. the sensor has confirmed the feed length), a labeling test can be carried out. (Every time the ribbon or label stock is replaced or the printhead is lifted, feed the media to ensure the sensor is calibrated and the label output position is accurate during data labeling.)
 2. Labeling test: Display operation: Main Menu > 8 Labeling Arm > Single Test mode; each press applies one label.
 3. RFID read/write labeling test: on the computer use the debug assistant, edit the content according to the command set, and set the machine IP and port (default 192.168.1.69, port 9100). Connect to the printer over the network and click Send to print and write according to the content sent.
 4. RFID read/write test content display: Main Menu > 7 RFID > RFID Write; the written content is displayed when print data is sent using the debug assistant.
 - 1) If label reading fails, after printing starts the label stays on the label pickup plate for a period; if it is not read, an error is reported.
 - 2) If the label does not follow the label pickup plate down when the labeling arm descends, a labeling failure error is reported.
 - 3) When replacing the ribbon or the label stock, install them correctly and always calibrate the media before labeling; otherwise labeling will fail.
3. Common problem notes:

操作及控制篇

软件连接打印贴标机处理说明

1.关于打印贴标机使用的打印指令文件。

客户提供详细标签样式，我们生成一种打印机可以识别的指令文件（文本形式），文件中将用户需要变化的字段（如产品名称，编号，条码号等）做一些特殊的处理，比如标记为111111，22222。。。。，打印时软件提前读取文件信息，将变化的字段数据替换其中。再将这个数据用 U T F 8 格式发给打印机就可以了。数据发送后，打印机可以给用户返回成功或失败，和失败后的故障信息，故障信息按位体现到返回信息中。

2.模板打印：

- 下载模板文件
使用BarLabel软件生成模板文件xxx.FRM，并下载到打印机中。
 - 调用模板打印
- ```
FR"xxx.FRM" //调用模板"xxx.FRM"
? //参数提示符
1 //第一个参数的值
Kg //第二个参数值
4.2 //第三个参数的值
P1,1 //启动打印
```

### 3.关于打印机网口使用说明：

设备后面板网口共有三种用途，分别是模板下载、网络打印、状态反馈。以下将对三种用途分别进行说明。

在使用网口前，首先要让打印贴标机和上位机处于同一网段，打印贴标机默认出厂IP为192.168.1.69 网关为192.168.1.1，端口为9100，用户可在系统设置-通讯接口-网络接口菜单下自行设置IP地址和本地端口，打印贴标机共有三个网络端口，分别是9100，9200和9300，9100端口用于打印数据的接收、打印模板的下载、控制指令的接收，9200端口主要用于打印贴标机状态的输出。9300端口用于网口扫码打印。打印数据端口9100用户可自行修改，但不可与9200端口、9300端口冲突，如要修改其余两个端口，需联系销售或售后人员。

### 用法说明

#### 1) 模板下载

利用 Barlabel 标签编辑软件制作号打印模板，下载打印模板的方式选择网络打印，选择需要下载的模板文件（.FRM）填写打印贴标机的IP地址及IP端口，即可通过网口将打印模板下载到打印贴标机中。

## Software Connection to the Print & Apply System

### 1. About the print command file used by the print & apply system

The customer provides the detailed label layout, and we generate a command file (text form) that the printer can recognize. In the file, the fields the user needs to vary (such as product name, number, barcode number, etc.) are specially marked, for example as 111111, 22222 ... When printing, the software reads the file in advance and replaces the varying field data, then sends the data to the printer in UTF-8 format. After the data is sent, the printer returns success or failure to the user, plus the fault information on failure; the fault information is reflected bit-by-bit in the returned message.

### 2. Template printing

### 3. About the printer network port

Usage notes: the rear-panel network port has three purposes - template download, network printing, and status feedback. The three purposes are described separately below.

Before using the network port, first put the print & apply system and the host computer on the same network segment. The factory default IP of the print & apply system is 192.168.1.69, the gateway is 192.168.1.1, and the port is 9100. The user can set the IP address and local port under System Settings > Communication Interface > Network Interface. The print & apply system has three network ports: 9100, 9200 and 9300. Port 9100 is used to receive print data, download print templates and receive control commands; port 9200 is mainly used to output the print & apply system status; port 9300 is used for network barcode-scan printing. The print data port 9100 can be changed by the user, but must not conflict with ports 9200 and 9300. To change the other two ports, contact sales or after-sales staff.

Use the Barlabel label editing software to create the print template. Select network printing as the download method, choose the template file (.FRM) to download, and enter the IP address and IP port of the print & apply system to download the template over the network.

Download template file

Invoke template printing

```
FR'xxx.FRM' // invoke template 'xxx.FRM'
```

```
? // parameter prompt
```

```
1 // value of the first parameter
```

```
Kg // value of the second parameter
```

```
4.2 // value of the third parameter
```

```
P1,1 // start printing
```

Use the BarLabel software to generate the template file xxx.FRM and download it to the printer.

## 操作及控制篇



使用 FR 指令调用打印模板时，也可以通过网口发送 FR 指令。

### 2 ) 网络打印

网络打印可细分为直接打印和调用驱动打印，直接打印即将打印内容以指令集的方式通过TCP/IP协议发送到打印贴标机中，打印机的 TCP/IP 连接方式为服务端长连接方式，调用驱动打印即安装 Nmark 打印机驱动，上位机通过调用打印机驱动，将标签数据发送到打印贴标机中。

#### 2.1 ) 直接打印

直接打印用户可利用本公司开发的 Barlabel 标签编辑软件进行标签编辑，该软件不需要安装驱动即可打印标签，用户在打印时选择网络打印，填写好打印机 IP 地址以及端口即可直接通过网口将标签数据下发给打印机。

#### 2.2 ) 调用驱动打印

调用网络驱动打印，用户需要在电脑上安装对应型号的打印贴标机网络驱动（安装教程参考Nmark 打印贴标机驱动安装教程及使用说明）然后通过网络驱动下发打印数据。

### 3 ) 状态反馈

用户可以通过 9200 端口监控打印贴标机状态，软件链接到打印机后，将打印机可以识别的数据信息发给打印机，打印机执行指定的命令，或打印标签数据命令。之后软件可以收取打印机返回的信息，得到打印成功或失败后的故障信息。

#### 返回的故障信息说明

0X7B 0XFF 0XFF 0X00 0X04 0X7C 0X00 0X00 0X00 0X00 0X7D

以上就是一个打印机打印后返回的信息（0X 表示 16 进制数据）。

## Operation & Control Section

### 2) Network printing

When using the FR command to invoke a print template, the FR command can also be sent over the network port. Network printing is divided into direct printing and driver printing. Direct printing sends the print content to the print & apply system as a command set over the TCP/IP protocol; the printer's TCP/IP connection is a server-side long connection. Driver printing means installing the Nmark printer driver; the host computer sends the label data to the print & apply system by calling the printer driver.

### 3) Status feedback

The user can monitor the print & apply system status through port 9200. After the software connects to the printer, it sends data the printer can recognize; the printer executes the specified command, or the label data command. The software can then receive the message returned by the printer and obtain the fault information after print success or failure.

Returned fault information description:

0X7B 0XFF 0XFF 0X00 0X04 0X7C 0X00 0X00 0X00 0X00 0X7D

The above is the message returned after printing (0X indicates hexadecimal data).

#### 2.1) Direct printing

For direct printing, the user can use our Barlabel label editing software to edit labels. This software prints labels without installing a driver. When printing, select network printing and enter the printer IP address and port to send the label data directly to the printer over the network.

#### 2.2) Driver printing

For network driver printing, the user needs to install the matching print & apply network driver for the model on the computer (see the Nmark print & apply driver installation tutorial and usage instructions), then send the print data through the network driver.

## 操作及控制篇

各个数据说明如下：

byte0: 数据开始标志

byte1,byte2:

0XFF 0XFF 正在打印中

0XFF 0XFE 打印完成

0XFF 0XFD 贴标完成

0XFF 0XFC 打印机空闲

byte3,byte4: 打印机状态数据长度 ( 0x00 0x04 )

byte5: 分割字符

byte6,byte7,byte8,byte9: 对应的 bit31---bit0，相应的 bit 置1，表示打印机不同的错误状态其中：

bit0--打印暂停

bit1--打印头抬起

bit2--缺纸

bit3--色带异常

bit4--色带缺失

bit5--黑标错误

bit6--打印头温度过高

bit7--打印头电压过低

bit8--打印数据异常

bit9--切刀异常

bit10--程序复位重启

bit11--贴标臂异常

byte10:数据结束标志

打印过程中，打印机实时返回打印机状态数据。

打印机空闲时，间隔 5 秒返回一条状态数据。

### 4 ) 扫码打印

用户可利用网口连接网络扫码器进行扫码打印，环境部署中将打印机作为服务端，扫码器作为客户端使用TCP/IP的通讯方式，配置读码器时，服务端IP地址为打印机IP地址，数据端口为9300。这种方式适用于脱机模板打印，扫码器扫码得到的信息可以用来替换模板中的变量和触发打印。

## Operation & Control Section

### 4) Barcode-scan printing

The user can connect a network barcode scanner over the network port for scan printing. In deployment, the printer acts as the server and the scanner as the client using TCP/IP communication. When configuring the reader, set the server IP address to the printer IP address and the data port to 9300. This method applies to offline template printing; the information scanned by the scanner can replace the template variables and trigger printing.

Each data item is described below:

byte0: data start flag

byte1, byte2:

0XFF 0XFF printing in progress

0XFF 0XFE print complete

0XFF 0XFD labeling complete

0XFF 0XFC printer idle

byte3, byte4: printer status data length (0x00 0x04)

byte5: separator character

byte6, byte7, byte8, byte9: correspond to bit31 - bit0. Setting a bit to 1 indicates a different printer error state, as follows:

bit0 - print paused

bit1 - printhead lifted

bit2 - out of paper

bit3 - ribbon error

bit4 - ribbon missing

bit5 - black mark error

bit6 - printhead temperature too high

bit7 - printhead voltage too low

bit8 - print data error

bit9 - cutter error

bit10 - program reset / restart

bit11 - labeling arm error

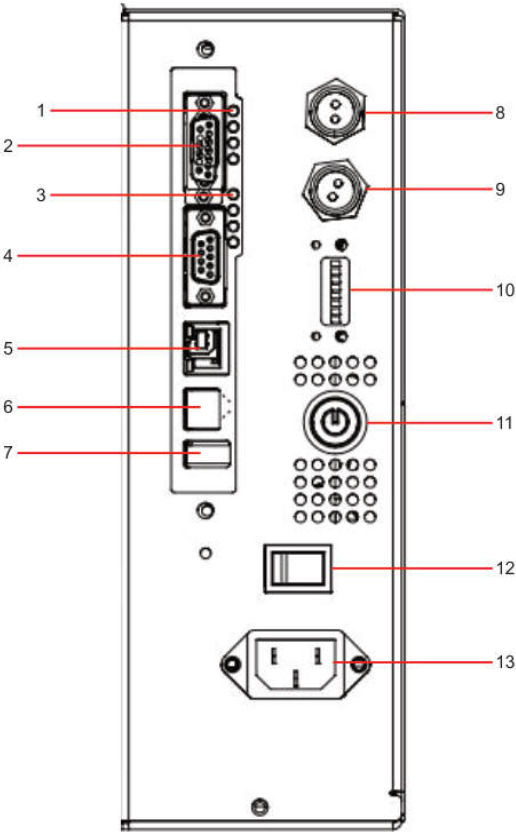
byte10: data end flag

During printing, the printer returns printer status data in real time. When the printer is idle, it returns one status message every 5 seconds.

操作及控制篇

硬件连接说明

1.后面板接口



|    |                                     |
|----|-------------------------------------|
| 1  | 1输出电源指示灯 2打印完成指示灯 3贴标完成指示灯 4报警信号指示灯 |
| 2  | 信号输入、信号输出接口C                        |
| 3  | 5打印使能指示灯 6贴标使能指示灯 7清除数据指示灯 8清除错误指示灯 |
| 4  | RS232数据串口                           |
| 5  | RJ45数据网口                            |
| 6  | USB数据接口                             |
| 7  | USB设备接口                             |
| 8  | 启动打印航插A                             |
| 9  | 启动贴标航插B                             |
| 10 | 传感器选择开关                             |
| 11 | 电源软开关                               |
| 12 | 电源总开关                               |
| 13 | 电源线接口                               |

## Hardware Connection

### 1. Rear panel interface

- 1 Output power indicator
- 2 Print complete indicator
- 3 Labeling complete indicator
- 4 Alarm signal indicator
- 5 Print enable indicator
- 6 Labeling enable indicator
- 7 Clear data indicator
- 8 Clear error indicator
- 9 Power soft switch
- 10 Power main switch
- 11 Power cord port
- 12 RJ45 data network port
- 13 Start-print aviation plug A
- Start-labeling aviation plug B
- USB data port
- USB device port
- Signal input / signal output interface C
- RS232 data serial port
- Sensor selection switch

*Illustration/diagram page - see the original Chinese document for the image.*

操作及控制篇

软件连接打印贴标机处理说明

1.1开关机方法

开机方法：按“电源总开关”到“--”闭合位置，再按一下“电源软开关”红灯亮起。  
关机方法1：按“电源总开关”到“O”断开位置。  
关机方法2：按显示面板“POWER键”确认关机，再按“电源总开关”到“O”断开位置。

1.2传感器选择开关用法（务必关机后更改）

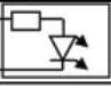
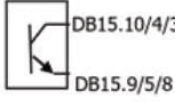
| 传感器选择开关 | 1-4路拨码开关 | 5-8路拨码开关 |
|---------|----------|----------|
| 选择反射传感器 | ON       | OFF      |
| 选择对射传感器 | OFF      | ON       |

1.3“RS232数据串口”DB9引脚定义：

| 打印机串口DB9母 |      |     |
|-----------|------|-----|
| 引脚号       | 功能说明 | 缩写  |
| 1         | 悬空   |     |
| 2         | 发送数据 | TXD |
| 3         | 接收数据 | RXD |
| 4         | 悬空   |     |
| 5         | 信号地  | GND |
| 6         | 悬空   |     |
| 7         | 悬空   |     |
| 8         | 悬空   |     |
| 9         | 悬空   |     |

1.4“信号输入、信号输出接口C” DB15引脚定义：

| 引脚号 | 线色 | 引脚定义     | 引脚缩写   | 引脚号    | 线色 | 引脚定义     | 引脚缩写   |
|-----|----|----------|--------|--------|----|----------|--------|
| 14  | 粉色 | 输出24V    | 24V    | 10     | 蓝  | 打印完成输出+  | ENDP+  |
| 15  | 浅绿 | 输出0V     | 0V     | 9      | 绿  | 打印完成输出 - | ENDP - |
| 3   | 棕  | 报警信号输出+  | ALM+   | 11     | 紫  | 清除数据输入+  | CLR+   |
| 8   | 黄  | 报警信号输出 - | ALM -  | 12     | 灰  | 清除数据输入 - | CLR -  |
| 4   | 棕白 | 贴标完成输出+  | ENDT+  | 13     | 白  | 清除错误输入   | CERR   |
| 5   | 红  | 贴标完成输出 - | ENDT - | 其余引脚悬空 |    |          |        |

|                     |      |                                                                                                     |
|---------------------|------|-----------------------------------------------------------------------------------------------------|
| 输入信号<br>(非隔离 PNP 型) | 启动打印 | 输入信号为高电平有效     |
|                     | 启动贴标 |                                                                                                     |
|                     | 清除错误 |                                                                                                     |
| 输入信号<br>(光耦隔离型)     | 清除数据 | NPN 或 PNP 型输入  |
| 输出信号<br>(光耦隔离型)     | 打印状态 | NPN 或 PNP 型输出  |
|                     | 贴标状态 |                                                                                                     |
|                     | 报警状态 |                                                                                                     |

## Software Connection to the Print & Apply System

### 1.1 Power on/off method

Power on: set the 'Power main switch' to the '--' closed position, then press the 'Power soft switch'; the red light turns on.

Power off method 1: set the 'Power main switch' to the 'O' open position.

Power off method 2: press the 'POWER key' on the display panel to confirm shutdown, then set the 'Power main switch' to the 'O' open position.

### 1.2 Sensor selection switch usage (must be changed after power-off)

Select reflective sensor: 1-4 DIP switch ON, 5-8 DIP switch OFF

Select through-beam sensor: 1-4 DIP switch OFF, 5-8 DIP switch ON

*1-4 DIP switch*

*5-8 DIP switch*

### 1.3 'RS232 data serial port' DB9 pin definition

Pin 1: NC Pin 2: transmit data (TXD) Pin 3: receive data (RXD)

Pin 4: NC Pin 5: signal ground (GND) Pin 6: NC

Pin 7: NC Pin 8: NC Pin 9: NC

*Printer serial port: DB9 female*

### 1.4 'Signal input / signal output interface C' DB15 pin definition

Pin 14 pink Output 24 V 24V

Pin 15 light green Output 0 V 0V

Pin 3 brown Alarm signal output + ALM+

Pin 8 yellow Alarm signal output - ALM-

Pin 4 brown/white Labeling complete output + ENDT+

Pin 5 red Labeling complete output - ENDT-

Pin 10 blue Print complete output + ENDP+

Pin 9 green Print complete output - ENDP-

Pin 11 purple Clear data input + CLR+

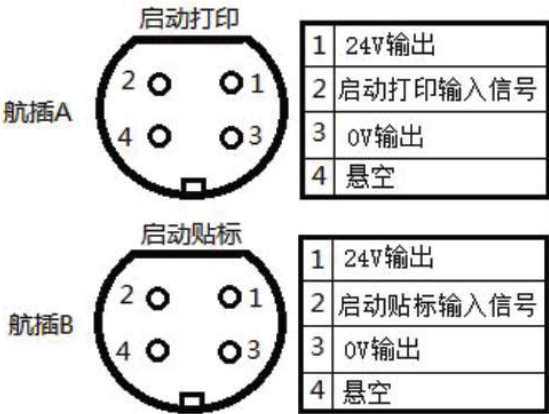
Pin 12 gray Clear data input - CLR-

Pin 13 white Clear error input CERR

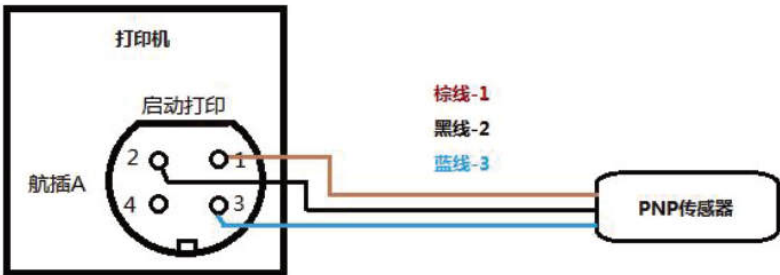
*Remaining pins are left floating (NC).*

操作及控制篇

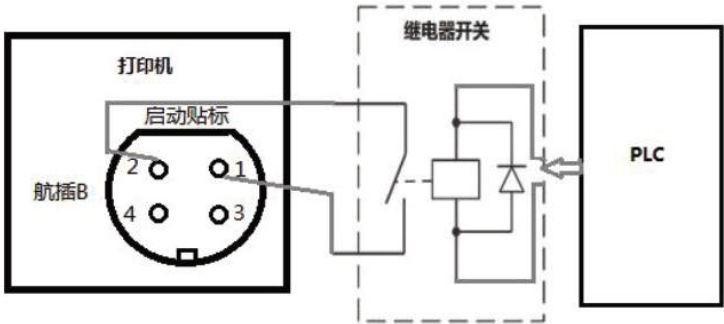
2.启动打印航插A、启动贴标航插B接线说明  
启动打印输入信号和启动贴标输入信号均为高有效，即输入信号接24V则启动。



2.1 只能接PNP型光电传感器  
以航插A“启动打印”信号为例，航插B接法相同。



2.2 接PLC方法  
以航插B“启动贴标”信号为例，航插A接法相同。



## Operation & Control Section

### 2. Start-print aviation plug A / start-labeling aviation plug B wiring

The start-print input signal and the start-labeling input signal are both active-high, i.e. the input is activated by connecting 24 V.

Take aviation plug A 'start printing' as the example; aviation plug B is wired the same way.

Take aviation plug B 'start labeling' as the example; aviation plug A is wired the same way.

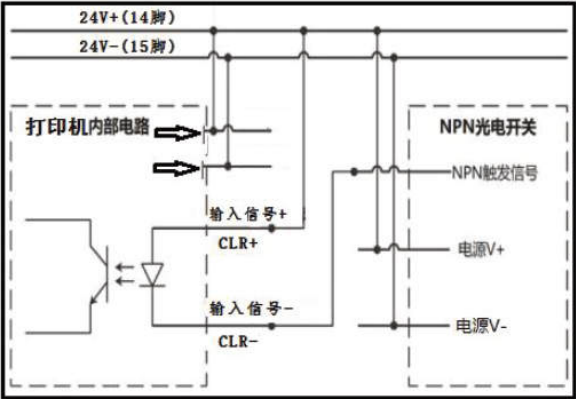
#### 2.1 Connect PNP photoelectric sensor only

#### 2.2 PLC connection method

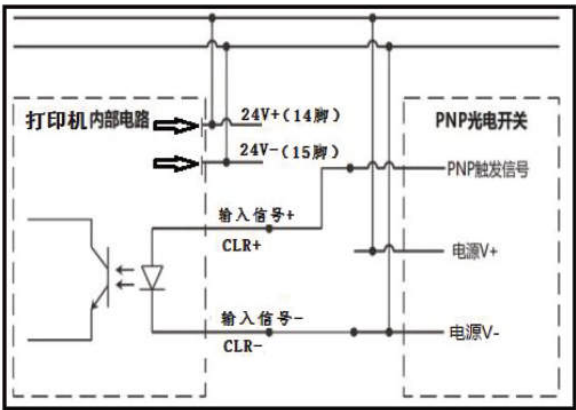
*Illustration/diagram page - see the original Chinese document for the image.*

操作及控制篇

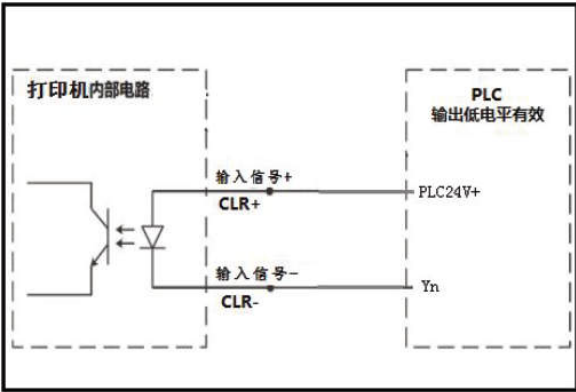
- 3. 接口C接线说明 ( 图中24V+即为24V , 24V-即为0V )
- 3.1 清除数据输入信号接光电传感器接法
- 3.1.1 接NPN型传感器



- 3.1.2 接PNP型传感器



- 3.2 清除数据输入信号接PLC接法
- 3.2.1 PLC输出有效信号为低电平 :



## Operation & Control Section

### 3. Interface C wiring (in the figure, 24V+ is 24 V and 24V- is 0 V)

#### 3.1 Clear data input signal connected to a photoelectric sensor

- 3.1.1 Connect an NPN sensor
- 3.1.2 Connect a PNP sensor

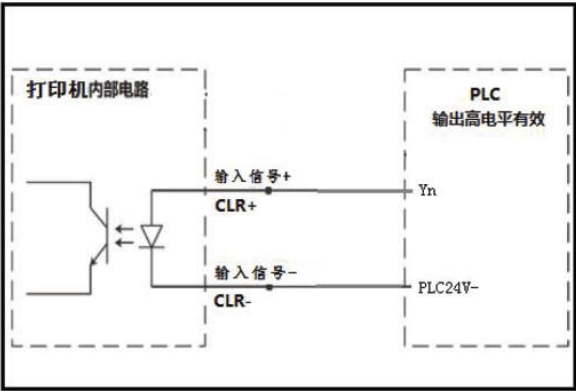
#### 3.2 Clear data input signal connected to a PLC

- 3.2.1 PLC output valid signal is low level:

*Illustration/diagram page - see the original Chinese document for the image.*

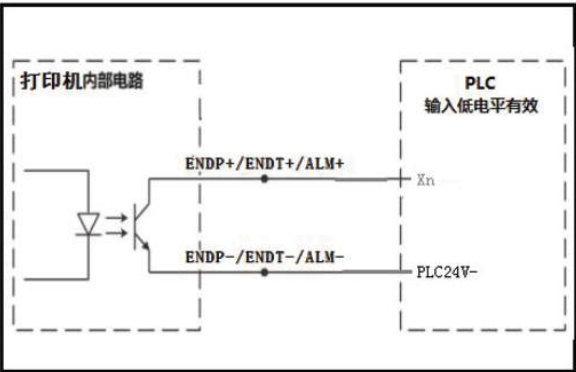
操作及控制篇

3.2.2 PLC输出有效信号为高电平：

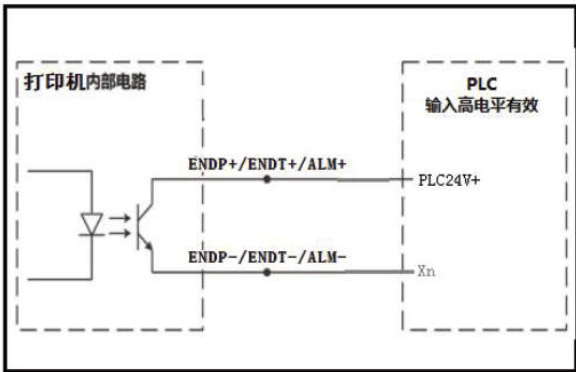


3.3接口C-输出信号接法（打印完成输出、贴标完成输出、报警信号输出）

1 ) PLC输入有效信号为低电平：



2 ) PLC输入有效信号为高电平：



## Operation & Control Section

### 3.2.2 PLC output valid signal is high level:

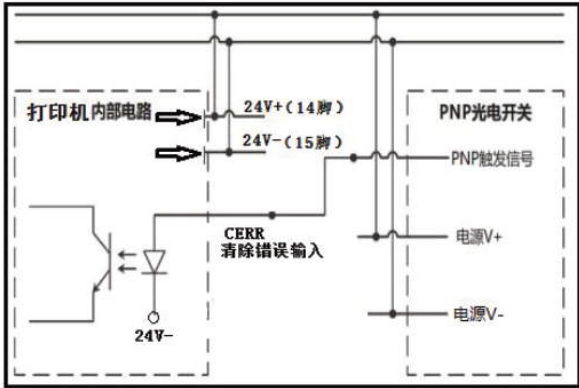
### 3.3 Interface C output signal connection (print complete output, labeling complete output, alarm signal output)

- 1) PLC input valid signal is low level:
- 2) PLC input valid signal is high level:

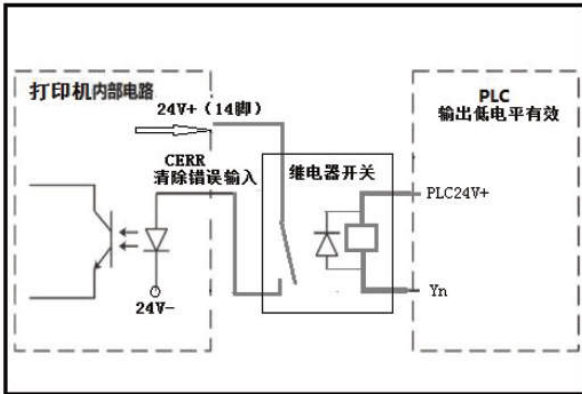
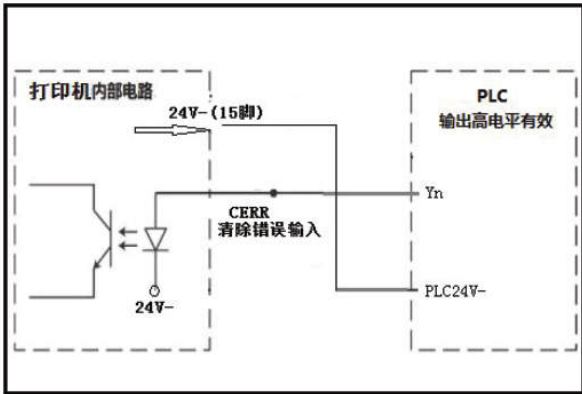
*Illustration/diagram page - see the original Chinese document for the image.*

操作及控制篇

- 3.4 接口C-清除错误信号  
清除错误输入信号为高电平有效，即清除错误输入信号接24V为有效。
- 3.4.1 只能接PNP型光电传感器



- 3.4.2 接PLC输出 ( PLC输出有效信号为高或低电平 )



## Operation & Control Section

### 3.4 Interface C clear error signal

#### 3.4.1 Connect PNP photoelectric sensor only

The clear error input signal is active-high, i.e. connecting the clear error input signal to 24 V activates it.

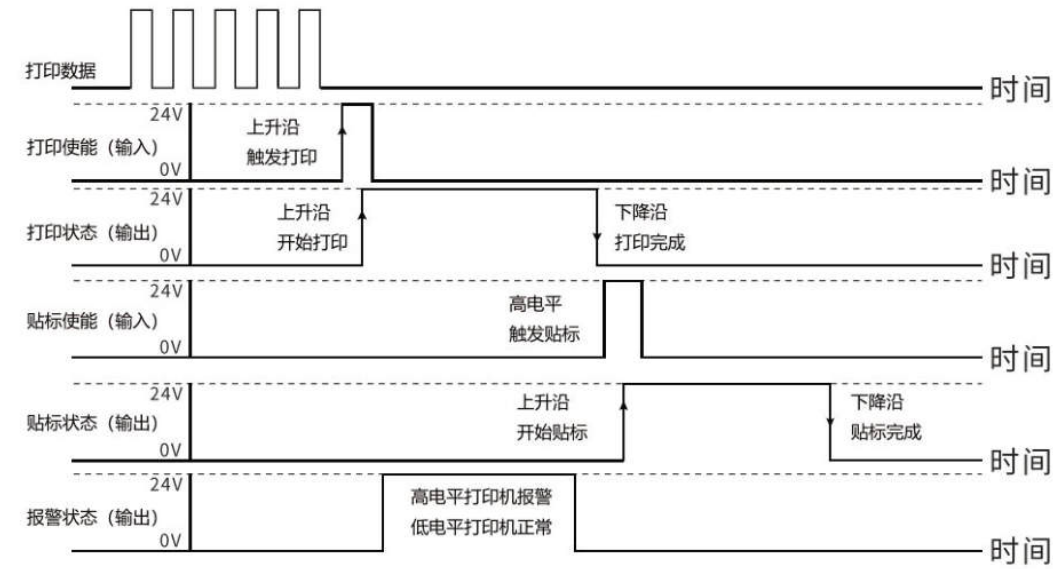
#### 3.4.2 Connect a PLC output (PLC output valid signal is high or low level)

*Illustration/diagram page - see the original Chinese document for the image.*

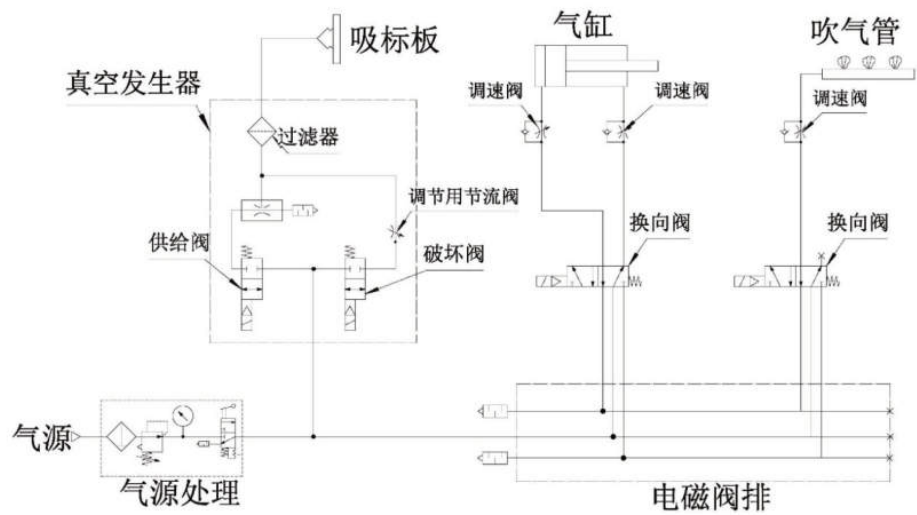
操作及控制篇

4. 时序图

贴标机打印贴标时序控制图：



5. 气动原理图



## **Operation & Control Section**

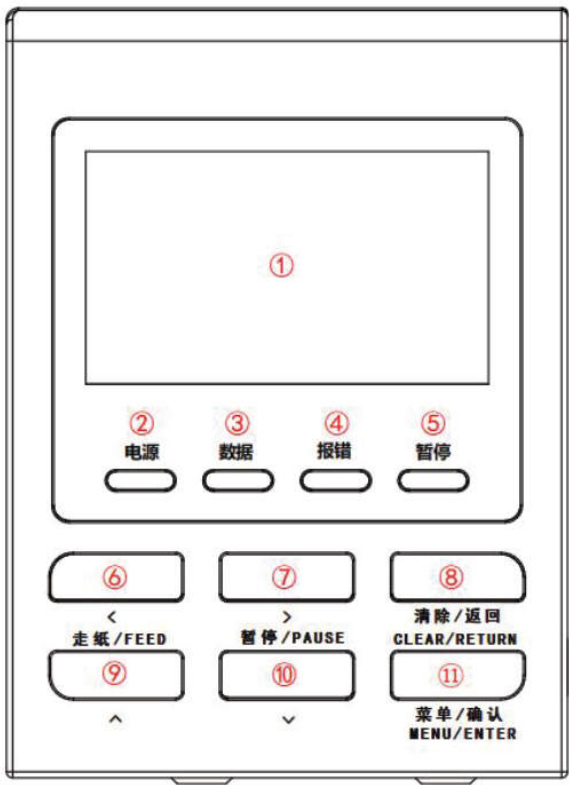
### **4. Timing diagram**

### **5. Pneumatic schematic diagram**

*Illustration/diagram page - see the original Chinese document for the image.*

操作及控制篇

控制面板说明



|    |                                                 |
|----|-------------------------------------------------|
| 1  | 显示屏显示打印机当前状态                                    |
| 2  | 电源（绿色指示灯）                                       |
| 3  | 数据（绿色指示灯）                                       |
| 4  | 报错（红色指示灯）                                       |
| 5  | 暂停（红色指示灯）                                       |
| 6  | 每次按下'走纸/FEED'可以强制打印机送出一张空白标签<br>'<'方向键左，仅在菜单中有效 |
| 7  | 按下'暂停/PAUSE'可以暂停/启动打印机打印<br>'>'方向键右，仅在菜单中有效     |
| 8  | '清除'消除错误，使打印机重新打印<br>'返回'返回上一层或退出菜单，仅在菜单中有效     |
| 9  | '^'方向键上，仅在菜单中有效，可更改参数值，常见用途是增大选项值               |
| 10 | 'v'方向键下，仅在菜单中有效，可更改参数值，常见用途是减小选项值               |
| 11 | '菜单'按下进入菜单功能<br>'确认'仅在菜单中有效。可以选择并确认显示屏上的        |

## Control Panel Description

- 1 Display - shows the current printer status
- 2 Power (green indicator)
- 3 Data (green indicator)
- 4 Error (red indicator)
- 5 Pause (red indicator)
- 6 'Clear' - clears errors so the printer can print again
- 7 'Return' - returns to the previous level or exits the menu (menu only)
- 8 'Menu' - press to enter the menu functions
- 9 Up arrow key - menu only; changes parameter values, usually increases the option value
- 10 Down arrow key - menu only; changes parameter values, usually decreases the option value
- 11 'Confirm' - menu only; selects and confirms the item on the screen

Each press of 'Feed/FEED' forces the printer to feed one blank label.

Pressing 'Pause/PAUSE' pauses / resumes printer printing.

Left arrow key - menu only. Right arrow key - menu only.

*Illustration/diagram page - see the original Chinese document for the image.*

操作及控制篇

屏幕说明 以下是打印机开机以后屏幕显示的信息



|         |                               |
|---------|-------------------------------|
| V4X0B-T | 打印机型号                         |
| NSCL    | 当前打印机使用的指令集                   |
| 在线      | 打印机当前状态                       |
| 打印数量    | 000000当前打印的数量，重启打印机后恢复000000. |
| 等待打印数据  | 等待上位机向打印机传送打印数据               |

用户菜单 以下是打印机的用户菜单以及各菜单中显示的项目。  
菜单

|    |          |
|----|----------|
| 1  | 系统设置     |
| 2  | 打印参数     |
| 3  | 传感器校正    |
| 4  | 贴标臂      |
| 5  | RFID     |
| 6  | 模板打印     |
| 7  | 配置选择     |
| 8  | 出厂设置     |
| 9  | 版本信息     |
| 10 | 系统重启     |
| 11 | LANGUAGE |

## Operation & Control Section

### Screen description

The following is the information shown on the printer screen after power-on.

Printer model: V4X0B-T

Command set currently used: NSCL

Printer current status: Online

Print count: 000000 - the current number printed; resets to 000000 after restart.

Waiting for print data: waiting for the host computer to send print data to the printer.

### User menu

The following are the printer's user menus and the items shown in each menu.

Menu:

- 1 System settings
- 2 Print parameters
- 3 Sensor calibration
- 4 Labeling arm
- 5 RFID
- 6 Template printing
- 7 Configuration selection
- 8 Factory settings
- 9 Version information
- 10 System restart
- 11 LANGUAGE

## 操作及控制篇

|         |                                                      |
|---------|------------------------------------------------------|
| 1.系统设置  |                                                      |
| 软件设置    | 【密码：1234】                                            |
| 指令集     | NSCL<br>NTPL<br>NZPL                                 |
| 触发模式    | 连续<br>单次                                             |
| 参数锁定    | 纸张类型<br>送纸偏移<br>坐标偏移<br>标签大小<br>打印方式<br>打印速度<br>打印浓度 |
| 兼容模式    | DEFAULT<br>TOSHIBA<br>ZEBRA                          |
| 起始偏移    |                                                      |
| 打印机标识   | 显示<br>不显示                                            |
| 残缺标签重打  |                                                      |
| 退纸模式    | 打印前退纸<br>打印后退纸                                       |
| 通讯接口    |                                                      |
| USB     |                                                      |
| RS232   | 波特率<br>数据位<br>停止位<br>校验位                             |
| 网络接口    | IP<br>子网<br>网关<br>端口                                 |
| 密码设置    | 设置密码<br>关闭密码                                         |
| 实时时钟    | 日期<br>时间<br>星期                                       |
| 报警设置    | 色带报警设置<br>仅报警提示<br>报警且停止打印<br>无数据报警<br>不报警           |
| 打印启动时报警 |                                                      |
| 等待数据时报警 |                                                      |

## Operation & Control Section

### 1. System settings

Software settings [Password: 1234]

Command set: NSCL / NTPL / NZPL

Trigger mode: continuous / single

Parameter lock

Media type

Feed offset

Coordinate offset

Label size

Print method

Print speed

Print darkness

Compatibility mode: DEFAULT / TOSHIBA / ZEBRA

Start offset

Printer ID: display / do not display

Reprint defective label

Retract mode: retract before printing / retract after printing

Communication interface: USB / RS232

Baud rate

Data bits

Stop bits

Parity

Network interface: IP / Subnet / Gateway / Port

Password settings: set password / disable password

Real-time clock: date / time / week

Alarm settings

Ribbon alarm settings: alarm only / alarm and stop printing

No-data alarm: no alarm / alarm at print start / alarm while waiting for data

操作及控制篇

|         |         |                                      |
|---------|---------|--------------------------------------|
| 2.打印参数  |         |                                      |
| 打印高度    |         |                                      |
| 打印宽度    |         |                                      |
|         | 标签间隙    |                                      |
|         | 打印方式    | 热转<br>热感                             |
|         | 纸张类型    | 连续<br>黑标<br>间隙                       |
|         | 打印速度    |                                      |
| 打印浓度    |         | 送纸偏移<br>X轴偏移<br>Y轴偏移<br>文本间距         |
| 打印数量    |         |                                      |
| 3.传感器校正 |         |                                      |
|         | 传感器自动检测 |                                      |
|         | 反射传感器设置 | 反射黑标阈值<br>反射缺纸阈值<br>传感器实时值<br>阈值设置向导 |
|         | 透射传感器设置 | 穿透间隙阈值<br>穿透缺纸阈值<br>传感器实时值<br>阈值设置向导 |
|         | 更新传感器信息 |                                      |
|         | 打印传感器曲线 |                                      |
| 4.贴标臂   |         |                                      |
| 参数设置    |         |                                      |
|         | 贴标类型    | 工业机<br>贴标机<br>刮贴机                    |
|         | 回卷电机    | 使能<br>禁止                             |
|         | 打印信号    | 脉冲<br>电平<br>禁止                       |
|         | 贴标信号    | 脉冲<br>电平<br>禁止                       |
|         | 打印周期    |                                      |
|         | 贴标延时    |                                      |
|         | 回卷长度    |                                      |
|         | 回卷速度    |                                      |
|         | 回卷暂停    |                                      |
|         | 延时回卷    |                                      |
|         | 掉签检测    | 使能<br>禁止                             |

## Operation & Control Section

### 2. Print parameters

- Print height
- Print width
- Label gap
- Print method: thermal transfer / direct thermal
- Media type: continuous / black mark / gap
- Print speed
- Print darkness
- Feed offset
- X-axis offset
- Y-axis offset
- Text spacing
- Print count

### 3. Sensor calibration

- Sensor auto-detect
- Reflective sensor settings
  - Reflective black mark threshold
  - Reflective out-of-paper threshold
  - Sensor real-time value
  - Threshold setting wizard
- Transmissive sensor settings
  - Transmissive gap threshold
  - Transmissive out-of-paper threshold
  - Sensor real-time value
  - Threshold setting wizard
- Update sensor information
- Print sensor curve

### 4. Labeling arm

- Parameter settings
  - Labeling type: industrial machine / labeling machine / scrape labeling machine
  - Rewind motor: enable / disable
  - Print signal: pulse / level / disable
  - Labeling signal: pulse / level / disable
  - Print cycle
  - Labeling delay
  - Rewind length
  - Rewind speed
  - Rewind pause
  - Delayed rewind
  - Dropped-label detection: enable / disable

操作及控制篇

|                            |                                                         |                          |
|----------------------------|---------------------------------------------------------|--------------------------|
|                            | 退纸延时<br>退纸速度<br>真空长度<br>压感过滤<br>到位信号                    | 使能<br>禁止                 |
| 贴标板复位                      | 贴标完成                                                    | 贴标板脱离接触                  |
|                            | 真空保持<br>吹标延时<br>回卷保持                                    | 长回卷<br>短回卷               |
| 测试模式                       | 单次贴标测试<br>循环贴标测试<br>单步贴标测试<br>贴标臂测试<br>回卷电机测试<br>打印循环测试 |                          |
| 贴标方式                       | 打印贴标<br>不打印贴标                                           |                          |
| 手动控制                       | 贴标臂<br>吹气管<br>吸标板<br>继电器                                |                          |
| 5.RFID<br>6.模板打印<br>模板     | 打印机<br>U盘                                               |                          |
| 变量<br>模式                   | FR指令<br>协议数据<br>IO信号<br>条码扫描                            |                          |
| 7.配置选择<br>配置_1             | 配置_2<br>配置_3<br>配置_4<br>配置_5                            |                          |
| 当前配置=><br>当前配置<=<br>8.出厂设置 | 恢复出厂                                                    | 否<br>是                   |
|                            | 系统监测                                                    | 系统配置页<br>打印头检测<br>标签打印测试 |

## Operation & Control Section

- Retract delay
- Retract speed
- Vacuum length
- Pressure-sense filter
- In-position signal: enable / disable
- Labeling complete
  - Labeling plate reset
  - Labeling plate disengage
  - Vacuum hold
  - Blow-label delay
  - Rewind hold: long rewind / short rewind
- Test mode
  - Single labeling test
  - Cycle labeling test
  - Step labeling test
  - Labeling arm test
  - Rewind motor test
  - Print cycle test
- Labeling method
  - Print & label
  - Label without printing
- Manual control
  - Labeling arm
  - Blow tube
  - Label pickup plate
  - Relay

### 5. RFID

### 6. Template printing

- Template: printer / USB drive
- Variable
- Mode: FR command / protocol data / IO signal / barcode scan

### 7. Configuration selection

- Config\_1 / Config\_2 / Config\_3 / Config\_4 / Config\_5
- Current config => / Current config <=

### 8. Factory settings

- Restore factory: no / yes
- System monitor
- System configuration page
- Printhead detection
- Label print test

操作及控制篇

|             |                         |                         |
|-------------|-------------------------|-------------------------|
|             | 实时监测                    | 打印头温度<br>碳带传感器<br>回卷传感器 |
| 9.版本信息      | 打印里程<br>调试模式<br>报警记录    |                         |
| 10.系统重启     | HARD:<br>BOOT:<br>SOFT: |                         |
| 11.LANGUAGE | 否<br>是                  |                         |
|             | CHINESE<br>ENGLISH      |                         |

菜单使用说明

- 1.贴标臂功能使用说明：

打印机需处于关机状态，按住菜单按键，打开打印机开关，当报错指示灯闪烁松开手，再次进入菜单中，贴标臂中的功能方可修改。
- 2.菜单设置使用说明：

菜单中参数或设置更改后需要先返回主界面，再关机重启打印机方可保存生效。

## Menu Usage Instructions

### 1. Labeling arm function usage

The printer must be in the off state. Hold the Menu key and turn on the printer switch; release it when the error indicator flashes. Then re-enter the menu, and the functions in the Labeling Arm menu can be modified.

After changing parameters or settings in the menu, return to the main screen first, then power off and restart the printer for the changes to be saved and take effect.

### 2. Menu setting usage

- Real-time monitoring
  - Printhead temperature
  - Ribbon sensor
  - Rewind sensor
  - Print distance
- Debug mode
- Alarm records

### 9. Version information

- HARD:
- BOOT:
- SOFT:

### 10. System restart

- No / Yes

### 11. LANGUAGE

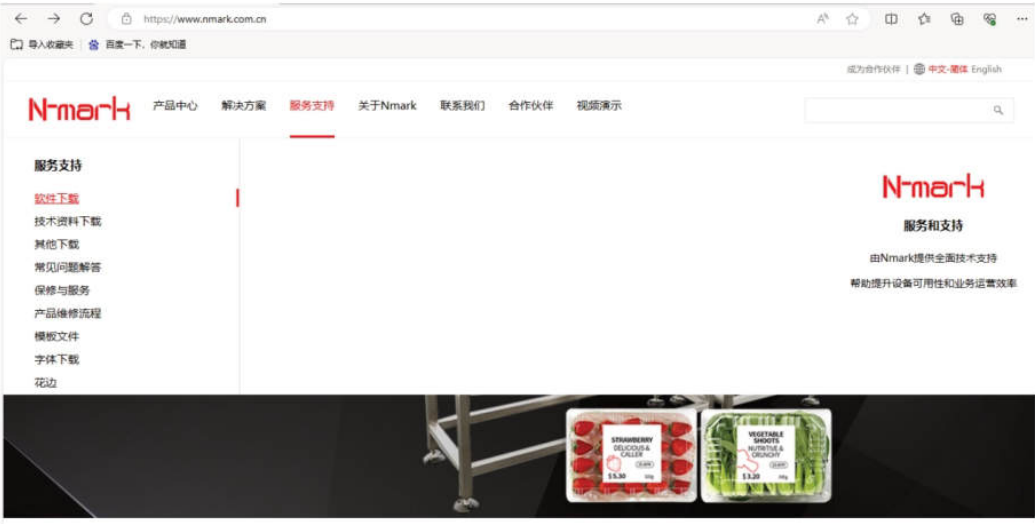
- CHINESE / ENGLISH

顶贴、侧贴篇

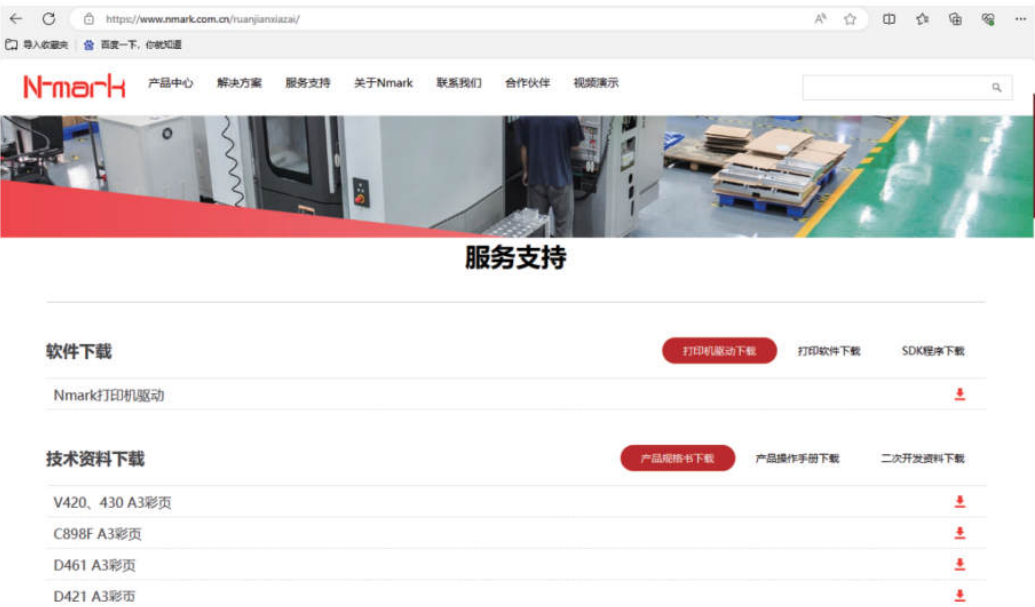
驱动安装

下载驱动

1. 电脑浏览器输入官方网址www.nmark.com.cn，进入官方网站，进入网站首页，点击服务支持，选择软件下载。



2. 点击打印机驱动下载，点击下载按钮。



## Driver Installation

### Download the Driver

1. Enter the official website [www.nmark.com.cn](http://www.nmark.com.cn) in a web browser, open the official website, enter the homepage, click Service & Support, and select Software Downloads.
2. Click Printer Driver Download, then click the Download button.

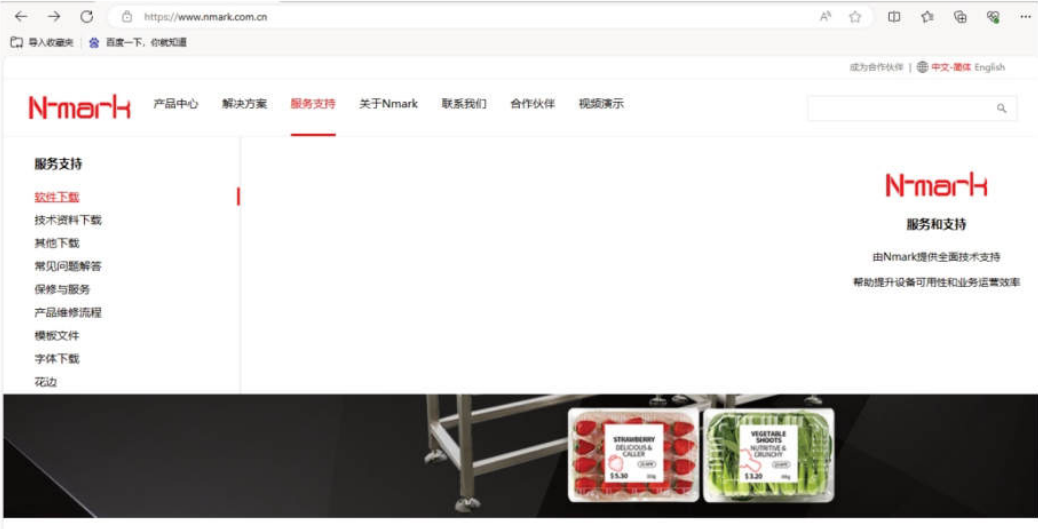
*Illustration/diagram page - see the original Chinese document for the image.*

操作及控制篇

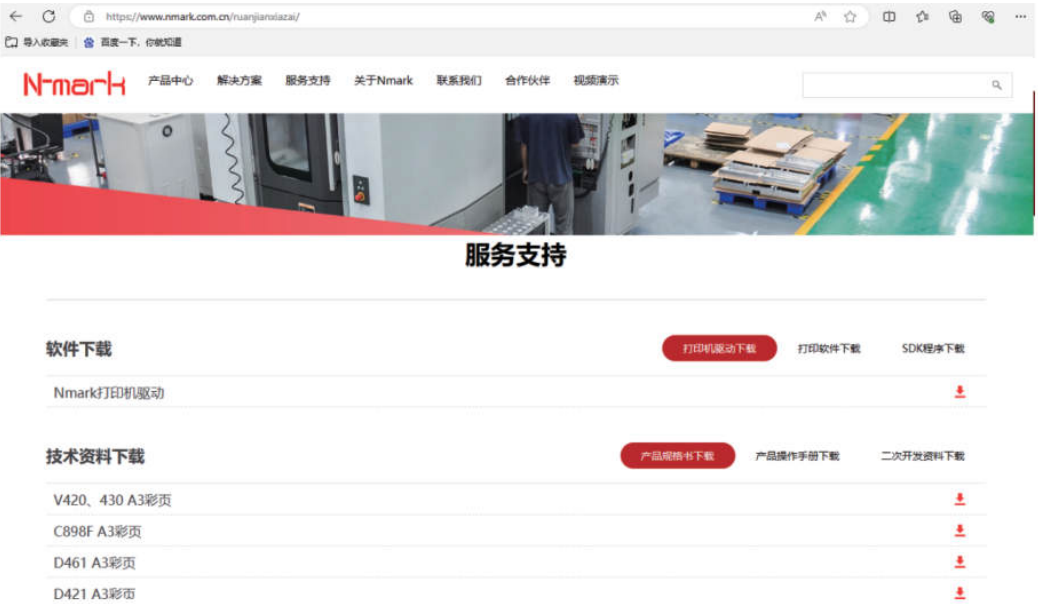
驱动安装

下载驱动

1. 电脑浏览器输入官方网址www.nmark.com.cn，进入官方网站，进入网站首页，点击服务支持，选择软件下载。



2. 点击打印机驱动下载，点击下载按钮。



## Driver Installation

### Download the Driver

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2. Click Printer Driver Download, then click the Download button.

*Illustration/diagram page - see the original Chinese document for the image.*

操作及控制篇

安装驱动

安装usb驱动

1.下载后解压打开文件夹，双击PrnInst.exe运行

|             |                 |        |          |
|-------------|-----------------|--------|----------|
| Common      | 2019/8/28 10:33 | 文件夹    |          |
| Tools       | 2019/8/28 10:33 | 文件夹    |          |
| Win32       | 2019/8/28 10:33 | 文件夹    |          |
| Win64       | 2019/8/28 10:33 | 文件夹    |          |
| License.eng | 2019/5/16 7:52  | ENG 文件 | 47 KB    |
| Nmark.cat   | 2019/8/14 14:07 | 安全目录   | 33 KB    |
| Nmark.inf   | 2019/8/14 14:03 | 安装信息   | 11 KB    |
| PrnInst.exe | 2019/8/14 14:08 | 应用程序   | 2,613 KB |
| readme.txt  | 2019/5/20 13:55 | 文本文档   | 4 KB     |

2.点击下一步。



## Install the Driver

### Install the USB driver

1. After downloading, extract and open the folder, then double-click PnInst.exe to run it.
2. Click Next.

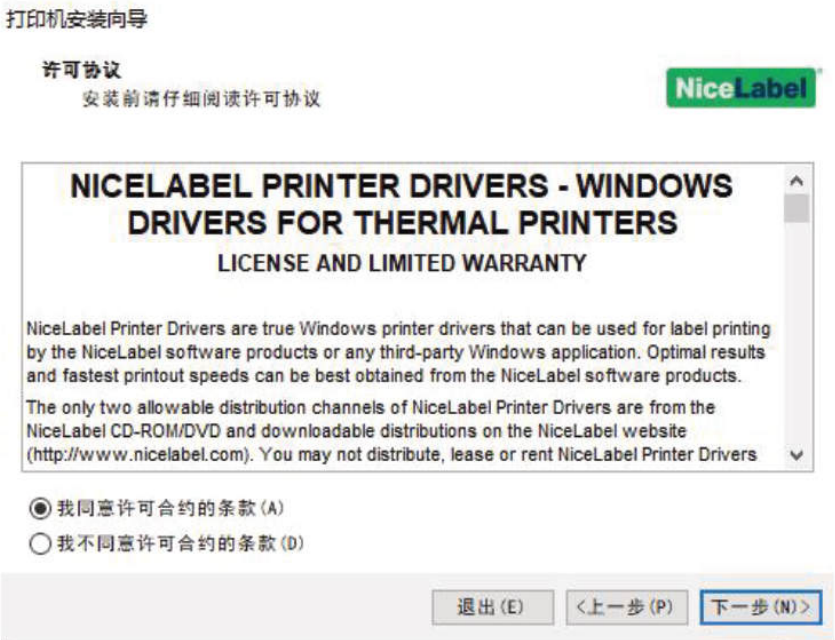
*Illustration/diagram page - see the original Chinese document for the image.*

操作及控制篇

3. 点击安装驱动



4. 选择我同意许可合约的条款，点击下一步



## Operation & Control Section

3. Click Install Driver.

4. Select 'I accept the terms of the license agreement' and click Next.

*Illustration/diagram page - see the original Chinese document for the image.*

## 操作及控制篇

## 5. 选择USB端口



## 6. 重新连接USB线



## Operation & Control Section

5. Select the USB port.
6. Reconnect the USB cable.

*Illustration/diagram page - see the original Chinese document for the image.*

操作及控制篇

7. 点击安装

打印机安装向导

打印机选项

NiceLabel

请在安装前指定打印机选项

Printer name:

Nmark D-430

驱动程序版本:

8.0.22.17536

端口名:

USB018

选择语言:

简体中文

位置:

备注:

☐

我要将这打印机设置为 Windows 默认打印机 (D)

退出 (E)

< 上一步 (P)

安装 (I)

8. 等待安装完成

打印机安装向导

正在安装设备驱动程序

NiceLabel

"打印机安装向导" 正在安装设备驱动程序。

正在安装设备驱动程序。

Nmark D-430

Easily design and print  
barcode labels

Get your free trial

取消 (C)

## Operation & Control Section

7. Click Install.

8. Wait for the installation to complete.

*Illustration/diagram page - see the original Chinese document for the image.*

操作及控制篇

9. 安装完成，点击退出

打印机安装向导

打印机选项

请在安装前指定打印机选项

NiceLabel

Printer name:

Nmark D-430

驱动程序版本:

8.0.22.17536

端口名:

USB018

选择语言:

简体中文

位置:

备注:

☐ 我要将这打印机设置为 Windows 默认打印机 (D)

退出 (E)

< 上一步 (P)

安装 (I)

安装网络端口驱动

1. 重复上述步骤一到步骤四，选择网络端口

打印机安装向导

选择端口

选择打印机已绑定的端口

NiceLabel

→ 网络端口(T)

安装有线或无线网络打印机

→ USB端口(U)

安装USB即插即用设备

→ 其他(O)

安装串口 (COM) 或并口 (LPT)

退出 (E)

< 上一步 (P)

下一步 (N) >

## Operation & Control Section

9. When the installation is complete, click Exit.

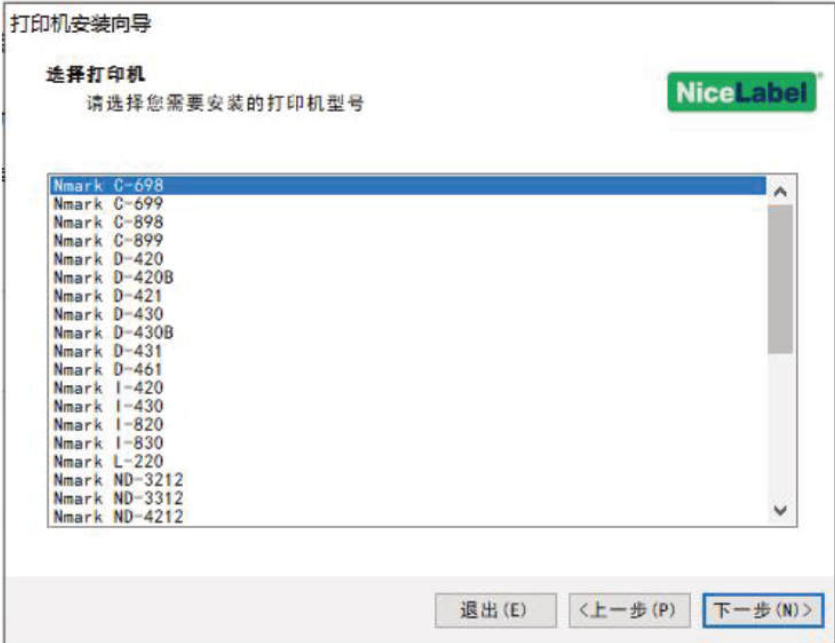
### Install the network port driver

1. Repeat steps 1 to 4 above and select Network Port.

*Illustration/diagram page - see the original Chinese document for the image.*

操作及控制篇

2.选择与打印机对印的驱动程序，点击下一步



3.选择创建一个新的网络端口，点击下一步



## Operation & Control Section

2. Select the driver that matches your printer and click Next.
3. Select 'Create a new network port' and click Next.

*Illustration/diagram page - see the original Chinese document for the image.*

## 操作及控制篇

4.输入打印机ip地址，打印机默认出厂ip地址为192.168.1.69，点击下一步

**打印机安装向导**

**添加网络端口**  
为目标打印机配置端口

NiceLabel

端口名: LAN\_Nmark\_V-430\_(1)\_(1)

打印机名或IP地址: 192.168.1.69

端口号: 9100

退出(E) <上一步(P) 下一步(N)>

5.点击安装

**打印机安装向导**

**打印机选项**  
请在安装前指定打印机选项

NiceLabel

Printer name: Nmark V-430

驱动程序版本: 8.0.22.17536

端口名: LAN\_Nmark\_V-430\_(1)\_(1)

选择语言: 简体中文

位置:

备注:

☐ 我要将这打印机设置为 Windows 默认打印机(D)

退出(E) <上一步(P) 安装(I)

## Operation & Control Section

4. Enter the printer IP address. The factory default IP address is 192.168.1.69. Click Next.
5. Click Install.

*Illustration/diagram page - see the original Chinese document for the image.*

操作及控制篇

6.等待安装完成



7.安装完成，点击退出



驱动设置

安装完成后，进入电脑控制面板，选择设备和打印机，右键打印机属性，点击端口，取消勾选启用双向支持，网络驱动修改ip地址选中打印机端口，点击配置端，即可修改ip地址。

## Operation & Control Section

6. Wait for the installation to complete.

7. When the installation is complete, click Exit.

### Driver settings

After installation, open the computer Control Panel, select Devices and Printers, right-click the printer and select Printer Properties, open the Ports tab, and clear 'Enable bidirectional support'. For the network driver, select the printer port, click Configure Port, and change the IP address.

*Illustration/diagram page - see the original Chinese document for the image.*

## Nmark打印贴标机色带报警说明

### Nmark打印贴标机色带报警说明

#### 一.功能描述

色带报警功能时Nmark打印贴标机的一项基础功能，设置该功能可以让用户第一时间知悉色带的使用情况，提醒用户及时更换色带，提高生产效率。色带报警功能有三种表现形式，一种为屏幕显示，一种为IO信号输出，一种为TCP/IP数据输出，IO信号输出和TCP/IP数据输出可利用在无人值守系统中，通过获取输出信号确定色带是否用完。

#### 二.设置方法及模式介绍

进入打印机菜单，进入系统设置子菜单，选择报警设置，可设置色带报警模式，有仅报警提示和报警且停止打印两种报警模式可选。

仅报警提示模式：

当色带用完后，在屏幕上提示色带错误，请检查色带是否用完，信号输出端口输出报错信号，TCP/IP输出报警数据。

报警且停止打印模式：

当色带用完后，在屏幕上提示色带错误，请检查色带是否用完，信号输出端口输出报错信号，TCP/IP输出报警数据，同时停止打印机的打印任务。

#### 三.外部信号接口输出

对与不同系列的Nmark打印贴标机，所使用的外部接口不同，本说明着重介绍报警输出相关的内容，其他内容请参考使用说明书获取更新信息。

#### 四.TCP/IP输出

关于具体的TCP/IP通讯说明可参考设备说明书操作及控制篇以下着重介绍报警输出。

返回的数据帧格式为：

0X7B 0XFF 0XFF 0X00 0X04 0X7C 0X00 0X00 0X00 0X00 0X7D

0X7B为byte0，色带报警标志位为byte9的bit4，当发生色带报警时，将该位置1。

## Nmark Print & Apply System Ribbon Alarm Instructions

### 1. Function description

The ribbon alarm is a basic function of the Nmark print & apply system. Enabling it lets the user know the ribbon status at the first moment, reminds the user to replace the ribbon in time, and improves production efficiency. The ribbon alarm has three output forms: screen display, IO signal output, and TCP/IP data output. The IO signal output and TCP/IP data output can be used in unattended systems, where the output signal determines whether the ribbon is used up.

### 2. Setting method and mode introduction

Enter the printer menu, enter the System Settings submenu, and select Alarm Settings to set the ribbon alarm mode. Two alarm modes are available: alarm only, and alarm and stop printing.

### 3. External signal interface output

Different series of Nmark print & apply systems use different external interfaces. This note focuses on the alarm output content; for other content, refer to the user manual for updated information.

### 4. TCP/IP output

For the specific TCP/IP communication description, refer to the Operation & Control section of the device manual. The following focuses on the alarm output.

0X7B is byte0; the ribbon alarm flag is bit4 of byte9. When a ribbon alarm occurs, this bit is set to 1.

The returned data frame format is:

```
0X7B 0XFF 0XFF 0X00 0X04 0X7C 0X00 0X00 0X00 0X00 0X7D
```

#### Alarm-only mode:

When the ribbon is used up, the screen shows a ribbon error prompting to check whether the ribbon is used up; the signal output port outputs an error signal and TCP/IP outputs the alarm data.

#### Alarm-and-stop-printing mode:

When the ribbon is used up, the screen shows a ribbon error prompting to check whether the ribbon is used up; the signal output port outputs an error signal and TCP/IP outputs the alarm data, while also stopping the printer's print jobs.

## Nmark工业打印机及打印贴标机错误出纸的解决方案

### Nmark工业打印机及打印贴标机错误出纸的解决方案

#### 一.在线打印

在线打印模式下打印过程中出现连续两张标签，可以使用以下几个方法查看：

- 1.在打印贴标机打印菜单中查看纸张类型和标签大小是否正确。
- 2.纸张类型如果为黑标纸，打开打印头，检查一下标签纸下方的传感器位置是否偏离，如果偏离，手动移动到便签纸底下。如果传感器表面有污渍，利用酒精擦拭传感器表面。
- 3.清除所有打印任务，在打印机菜单中找到参数校准，选择传感器自动检测校准传感器参数。如果打印贴标机类型为V4X0B系列，在传感器校准完成后，屏幕会显示传感器曲线，如果曲线波峰太小或者传感器曲线为一条直线，可能传感器损坏。
- 4.更换纸张类型为间隙纸，需要在打印机系统设置，软件设置里边将纸张类型锁定按照步骤三校准传感器参数。
- 5.适当增加贴标臂选项中的贴标延时，以过滤干扰型号。

注：传感器校准方法见下方在线打印方法传感器校准方法

#### 二.脱机模板

在线打印模式下打印过程中出现连续两张标签，可以使用以下几个方法查看：

- 1.在打印贴标机打印菜单中查看纸张类型和标签大小是否正确。
- 2.纸张类型如果为黑标纸，打开打印头，检查一下标签纸下方的传感器位置是否偏离，如果偏离，手动移动到标签纸底下。如果传感器表面有污渍，利用酒精擦拭传感器表面。传感器图片见图1。
- 3.关闭打印贴标机，按住走纸键不松手，当报错灯闪烁时，松开走纸键，打印贴标机自动校准传感器参数。
- 4.将模板触发模式修改为FR指令，重启打印贴标机，在打印机菜单中找到参数校准，选择传感器自动检测校准传感器参数。如果打印贴标机类型为V4X0B系列，在传感器校准完成后，屏幕会显示传感器曲线，如果曲线波峰太小或者传感器曲线为一条直线，可能传感器损坏。
- 6.不修改模板触发模式，将纸张类型修改为除连续纸外的另外一个，需要在打印机系统设置，软件设置里边将纸张类型锁定按照步骤四校准传感器参数。
- 7.适当增加贴标臂选项中的贴标延时，以过滤干扰型号。

注：传感器校准方法见下方脱机模板方法传感器校准方法



图1

## Solution to Nmark Industrial Printer & Print & Apply System Error Feeding

### 1. Online printing

In online printing mode, if two consecutive labels appear during printing, the following methods can be used to check:

1. In the print & apply system's print menu, check that the media type and label size are correct.
2. If the media type is black-mark paper, open the printhead and check whether the sensor under the label stock has drifted. If it has, move it back under the label stock by hand. If the sensor surface is dirty, wipe the sensor surface with alcohol.
3. Clear all print jobs, find Parameter Calibration in the printer menu, and select Sensor Auto-detect to calibrate the sensor parameters. If the print & apply system is a V4X0B series, the screen shows the sensor curve after calibration; if the curve peak is too small or the curve is a straight line, the sensor may be damaged.
4. When changing the media type to gap paper, lock the media type under Printer System Settings > Software Settings, then calibrate the sensor parameters as in step 3.
5. Increase the labeling delay in the Labeling Arm options as appropriate to filter out interference signals.

### 2. Offline template

In online printing mode, if two consecutive labels appear during printing, the following methods can be used to check:

1. In the print & apply system's print menu, check that the media type and label size are correct.
2. If the media type is black-mark paper, open the printhead and check whether the sensor under the label stock has drifted. If it has, move it back under the label stock by hand. If the sensor surface is dirty, wipe the sensor surface with alcohol. See Figure 1 for the sensor picture.
3. Power off the print & apply system, hold the feed key without releasing it, and release the feed key when the error indicator flashes; the print & apply system calibrates the sensor parameters automatically.
4. Change the template trigger mode to FR command, restart the print & apply system, find Parameter Calibration in the printer menu, and select Sensor Auto-detect to calibrate the sensor parameters. If the print & apply system is a V4X0B series, the screen shows the sensor curve after calibration; if the curve peak is too small or the curve is a straight line, the sensor may be damaged.
6. Without changing the template trigger mode, change the media type to one other than continuous paper; lock the media type under Printer System Settings > Software Settings, then calibrate the sensor parameters as in step 4.
7. Increase the labeling delay in the Labeling Arm options as appropriate to filter out interference signals.

*Black mark sensor*

*Note: for the sensor calibration method, see the online-printing sensor calibration method below.*

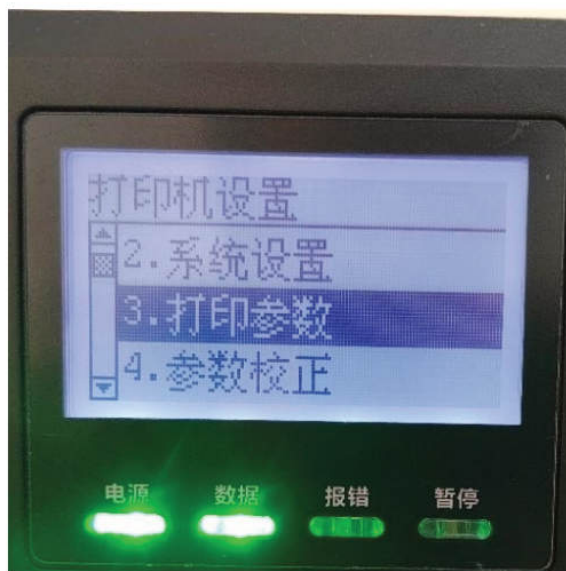
*Note: for the sensor calibration method, see the offline-template sensor calibration method below.*

## Nmark工业打印机及打印贴标机错误出纸的解决方案

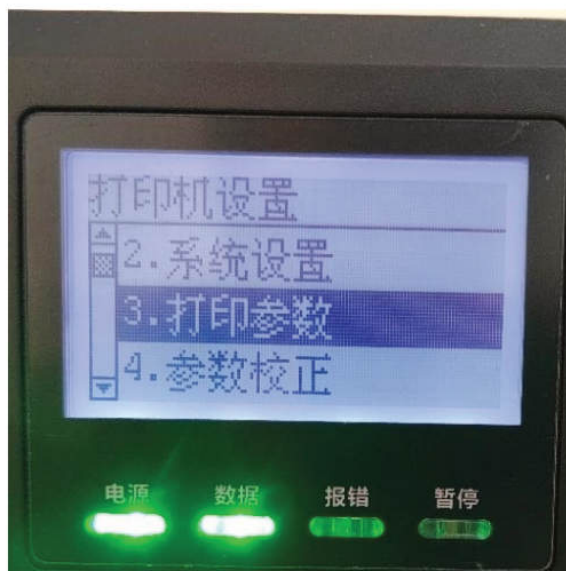
### 三.在线打印方式传感器校准方法

#### V4X0系列传感器校准方法

- 1.进入打印机菜单，选择打印参数



- 2.进入打印参数菜单，查看纸张类型，如果纸张类型为黑标，必须确保黑标传感器位于标签纸正下方



## **Solution to Nmark Industrial Printer & Print & Apply System Error Feeding**

### **3. Sensor calibration for online printing**

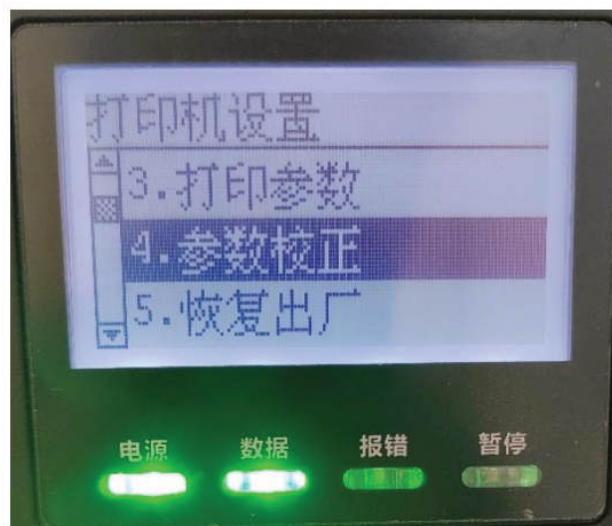
#### **V4X0 series sensor calibration method**

1. Enter the printer menu and select Print Parameters.
2. Enter the Print Parameters menu and check the media type. If the media type is black mark, ensure the black mark sensor is directly under the label stock.

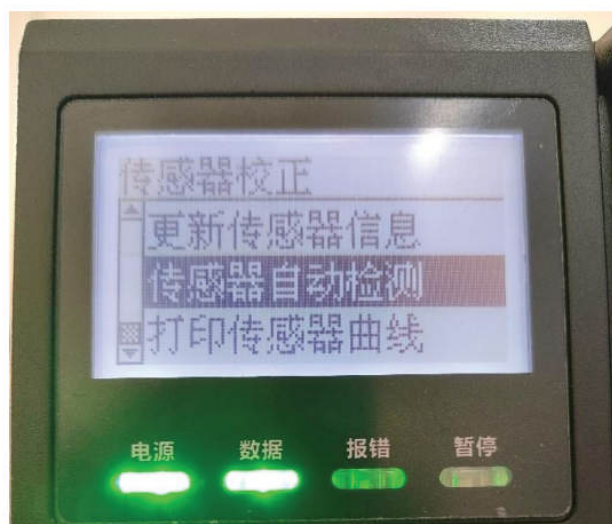
*Illustration/diagram page - see the original Chinese document for the image.*

## Nmark工业打印机及打印贴标机错误出纸的解决方案

3.返回打印机菜单界面，选择参数校正，按确认键进入



4.选择传感器自动检测，按确认键开始进行传感器校准。



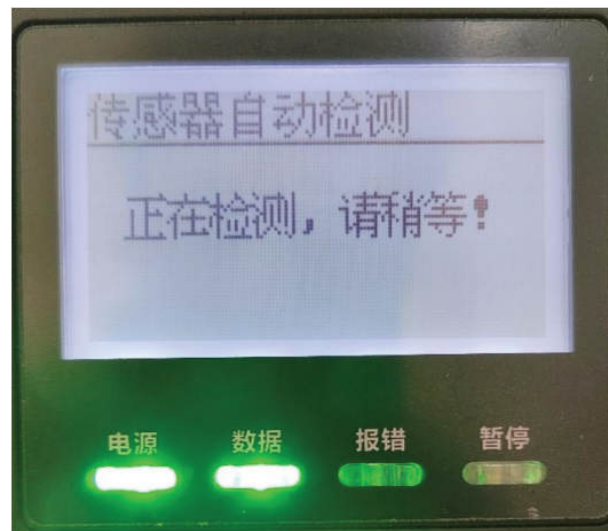
## **Solution to Nmark Industrial Printer & Print & Apply System Error Feeding**

3. Return to the printer menu, select Parameter Calibration, and press the OK key to enter.
4. Select Sensor Auto-detect and press the OK key to start sensor calibration.

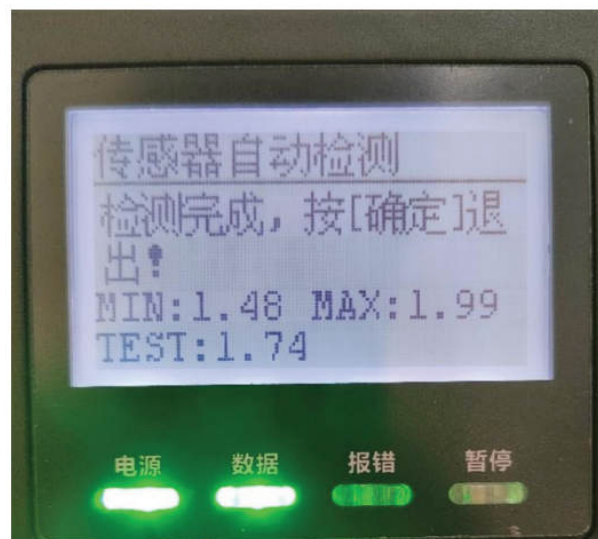
*Illustration/diagram page - see the original Chinese document for the image.*

## Nmark工业打印机及打印贴标机错误出纸的解决方案

### 5.等待校准完成



### 6.校准完成后屏幕显示传感器最大值, 最小值以及测试值



## **Solution to Nmark Industrial Printer & Print & Apply System Error Feeding**

5. Wait for the calibration to complete.

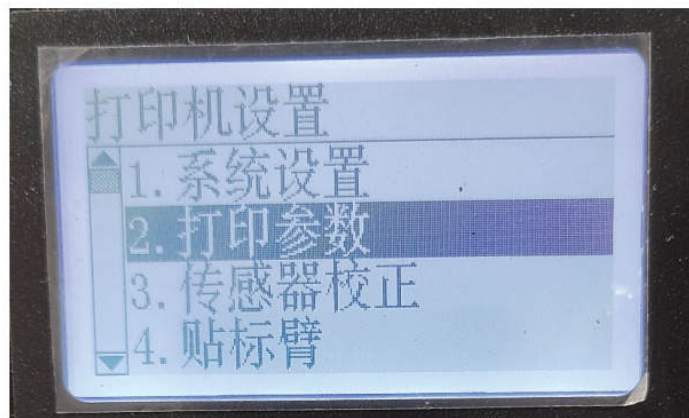
6. After calibration, the screen shows the sensor maximum value, minimum value and test value.

*Illustration/diagram page - see the original Chinese document for the image.*

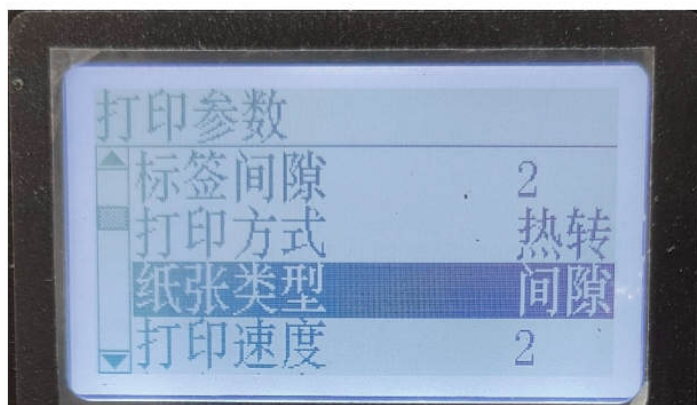
## Nmark工业打印机及打印贴标机错误出纸的解决方案

## V4X0B系列传感器校准方法

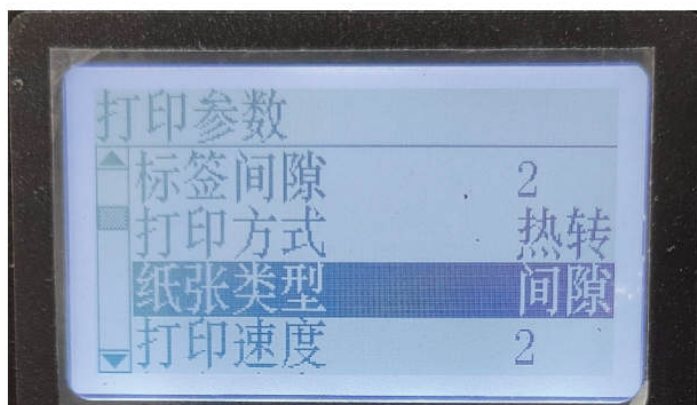
1. 进入打印机菜单，选择打印参数



2. 进入打印参数菜单，查看纸张类型，如果纸张类型为黑标，必须确保黑标传感器位于标签纸正下方



3. 返回打印机菜单界面，选择传感器校正，按确认键进入



## **Solution to Nmark Industrial Printer & Print & Apply System Error Feeding**

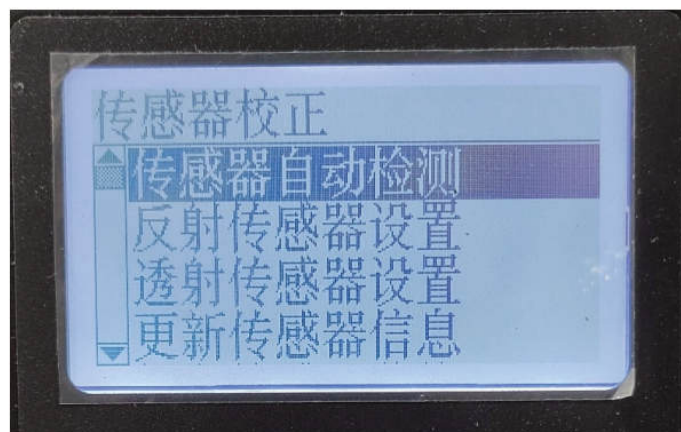
### **V4X0B series sensor calibration method**

1. Enter the printer menu and select Print Parameters.
2. Enter the Print Parameters menu and check the media type. If the media type is black mark, ensure the black mark sensor is directly under the label stock.
3. Return to the printer menu, select Sensor Calibration, and press the OK key to enter.

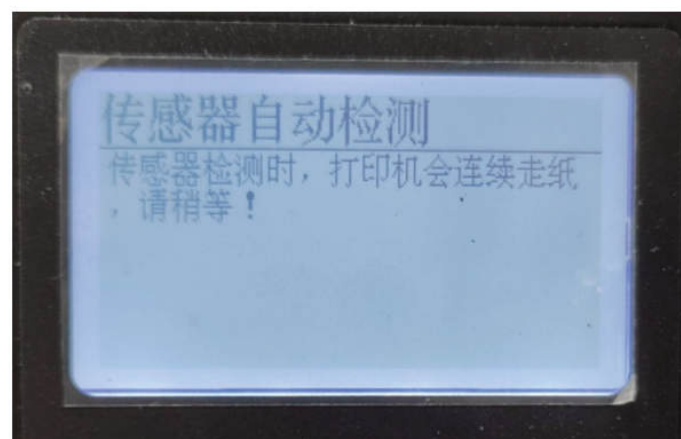
*Illustration/diagram page - see the original Chinese document for the image.*

## Nmark工业打印机及打印贴标机错误出纸的解决方案

4. 选择传感器自动检测，按确认键开始进行传感器校准



5. 等待校准完成



6. 校准完成后屏幕显示传感器最大值，最小值以及测试值。同时会在屏幕上打印出所选的传感器曲线



## **Solution to Nmark Industrial Printer & Print & Apply System Error Feeding**

4. Select Sensor Auto-detect and press the OK key to start sensor calibration.
5. Wait for the calibration to complete.
6. After calibration, the screen shows the sensor maximum value, minimum value and test value, and also prints the selected sensor curve on the screen.

*Illustration/diagram page - see the original Chinese document for the image.*

## Nmark工业打印机及打印贴标机错误出纸的解决方案

### 四.脱机模板方式传感器校准方法

方式1：将模板触发方式修改为FR指令，关闭打印机，按住键盘走纸键不松手，开启电源，当报错灯闪烁时松开走纸键，打印机开始自动校准传感器。

方式2. 修改纸张类型，需要在打印机系统设置，软件设置里边将纸张类型锁定，直接关闭打印机，按住键盘走纸键不松手，开启电源，当报错灯闪烁时松开走纸键，打印机开始自动校准传感器。

## **Solution to Nmark Industrial Printer & Print & Apply System Error Feeding**

### **4. Sensor calibration for offline template**

Method 1: change the template trigger mode to FR command, turn off the printer, hold the keyboard feed key without releasing it and turn on the power. When the error indicator flashes, release the feed key, and the printer starts calibrating the sensor automatically.

Method 2: change the media type - lock the media type under Printer System Settings > Software Settings, then turn off the printer directly, hold the keyboard feed key without releasing it and turn on the power. When the error indicator flashes, release the feed key, and the printer starts calibrating the sensor automatically.

## Nmark打印贴标机相关参数说明

### Nmark打印贴标机相关参数说明

#### 打印参数

打印高度：所使用的标签高度。  
 打印宽度：所使用的标签宽度。  
 间隙高度：两个标签之间的间隙大小。  
 打印方式：无色带使用热感，有色带使用热转。  
 纸张类型：使用的标签纸类型，修改纸张类型可修改使用的传感器，连续纸不使用传感器，黑标纸使用反射传感器，间隙纸使用透射传感器。  
 打印浓度：浓度越大，颜色越深。浓度越小，颜色越浅。  
 打印速度：控制打印标签的速度。  
 进纸偏移：下一张标签边缘距离剥离片边缘的位置。  
 X轴偏移：标签内容在标签纸上的横向位置偏移。  
 Y轴偏移：标签内容在标签纸上的纵向位置偏移。  
 文本间距：模板中文本变量的字符间距。  
 打印数量：有受控和不受控两种，受控表示上位机发送多少标签数据，贴标机打印多少标签数据，不受控表示贴标机打印的标签数量与上位机发送的数量无关。

#### 贴标参数

贴标类型：设置贴标机的工作模式，与机器类型有关。  
 回卷电机：使能/禁止回卷电机  
 打印信号：脉冲/电平/禁止（选脉冲或电平方式，发送打印数据后需要io触发打印）  
 贴标信号：脉冲/电平/禁止（选脉冲或电平方式，打印完成后需要io触发贴标）  
 打印周期：两次打印之间的时间间隔  
 贴标延时：接收到贴标信号后，延时贴标  
 回卷长度：回卷电机退纸长度  
 回卷速度：回卷电机的速度  
 回卷暂停：回卷电机暂停的距离，影响标签和贴标板之间的缝隙大小  
 延时回卷：回卷暂停后，设置回卷重新启动的延时，保证标签更好的吸紧  
 掉签检测：是否检测贴标板下方有标签  
 退纸延时：控制贴标板下压过程中，回卷电机回退的时机  
 退纸速度：打印机电机回退速度  
 真空长度：正打印过程中，控制贴标板的吸真空位置大小  
 压感过滤：过滤贴标板开始下压时异常信号  
 到位信号：贴标板接触到贴标问题触发的信号  
 贴标完成：贴标完成信号触发的位置  
 真空保持：设置贴标板接触物体的时间长短  
 吹标延时：吹标时长（吹标机使用）  
 回卷保持：回卷电机模式



打印贴标机操作视频



工业打印机操作视频

## Nmark Print & Apply System Parameter Reference

### Print parameters

Print height: the height of the label in use.

Print width: the width of the label in use.

Gap height: the size of the gap between two labels.

Print method: use direct thermal when there is no ribbon; use thermal transfer when there is a ribbon.

Media type: the type of label stock in use. Changing the media type changes the sensor used - continuous paper uses no sensor, black-mark paper uses the reflective sensor, and gap paper uses the transmissive sensor.

Print darkness: the higher the value, the darker; the lower the value, the lighter.

Print speed: controls the speed of label printing.

Feed offset: the position of the next label edge relative to the edge of the peel-off plate.

X-axis offset: the horizontal position offset of the label content on the label stock.

Y-axis offset: the vertical position offset of the label content on the label stock.

Text spacing: the character spacing of text variables in the template.

Print count: two modes - controlled and uncontrolled. Controlled means the print & apply system prints as many labels as the host computer sends; uncontrolled means the number of labels printed is independent of the number sent by the host computer.

### Labeling parameters

Labeling type: sets the working mode of the labeling machine, related to the machine type.

Rewind motor: enable / disable the rewind motor.

Print signal: pulse / level / disable (with pulse or level selected, an IO trigger is required to print after sending the print data).

Labeling signal: pulse / level / disable (with pulse or level selected, an IO trigger is required to label after printing completes).

Print cycle: the time interval between two prints.

Labeling delay: delay the labeling after receiving the labeling signal.

Rewind length: the media retract length of the rewind motor.

Rewind speed: the speed of the rewind motor.

Rewind pause: the distance the rewind motor pauses, affecting the gap between the label and the labeling plate.

Delayed rewind: after the rewind pause, sets the delay before the rewind restarts, to ensure the label is held more firmly.

Dropped-label detection: whether to detect a label under the labeling plate.

Retract delay: controls the timing of the rewind motor retract during the downward stroke of the labeling plate.

Retract speed: the retract speed of the printer motor.

Vacuum length: controls the vacuum pickup position of the labeling plate during printing.

Pressure-sense filter: filters abnormal signals when the labeling plate starts to press down.

In-position signal: the signal triggered when the labeling plate contacts the labeling object.

Labeling complete: the position where the labeling-complete signal triggers.

Vacuum hold: sets how long the labeling plate contacts the object.

Blow-label delay: the blow-label duration (used by blow-labeling machines).

Rewind hold: the rewind motor mode.

## Nmark打印贴标机相关参数说明

### 系统参数

指令集：选择打印机当前支持指令集  
触发模式：打印信号触发后打印的数量  
参数锁定：某个参数锁定后，该参数不受上位机影响

### 传感器参数

反射黑标阈值：检测标签起始和结束的阈值  
反射缺纸阈值：检测有无纸张的阈值，大于该值，表示无纸  
透射间隙阈值：检测标签起始和结束的阈值  
透射缺纸阈值：检测有无纸张的阈值，大于该值，表示无纸

### 模板打印触发模式

FR指令：FR指令  
协议数据：特殊协议  
IO信号：需要连接外部的IO信号  
条码扫描：主USB口连接扫码枪

## Nmark Print & Apply System Parameter Reference

### System parameters

Command set: selects the command set currently supported by the printer.

Trigger mode: the number of labels printed after the print signal is triggered.

Parameter lock: when a parameter is locked, it is not affected by the host computer.

### Sensor parameters

Reflective black mark threshold: the threshold for detecting the label start and end.

Reflective out-of-paper threshold: the threshold for detecting whether there is media; above this value means out of paper.

Transmissive gap threshold: the threshold for detecting the label start and end.

Transmissive out-of-paper threshold: the threshold for detecting whether there is media; above this value means out of paper.

### Template print trigger mode

FR command: the FR command.

Protocol data: special protocol.

IO signal: requires connection of external IO signals.

Barcode scan: connect a barcode scanner to the main USB port.

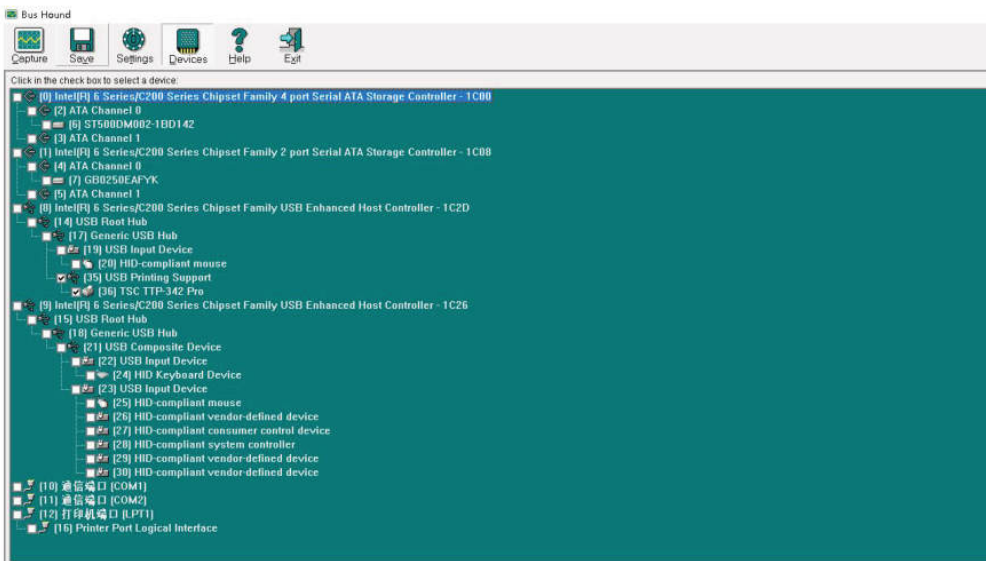
Nmark打印贴标机USB打印对接其他专用软件指导

Nmark打印贴标机USB打印对接其他专用软件指导

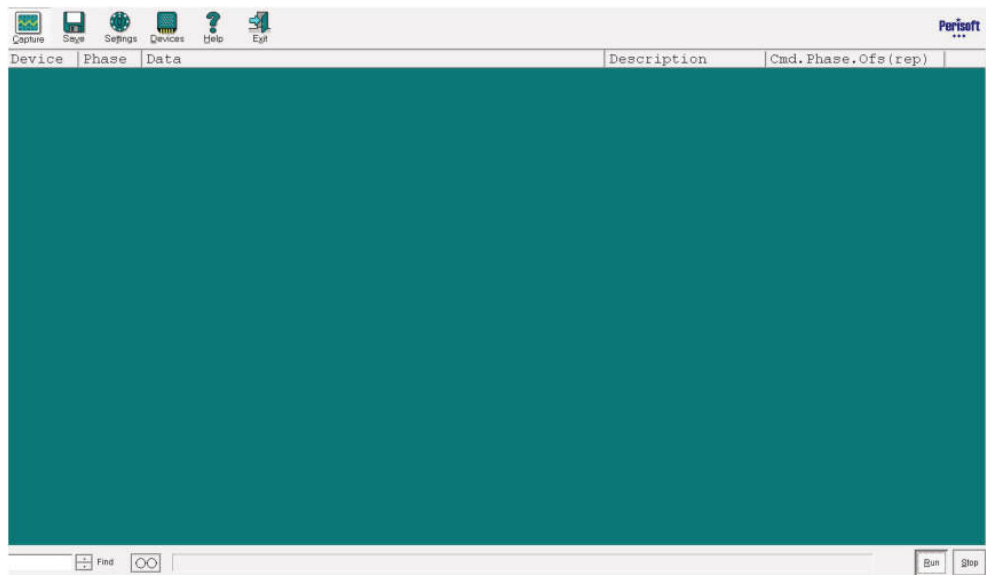
由于USB通讯的特殊性，使用其他打印机专用软件调用Nmark打印机驱动会出现错误，当必须使用其他专用软件时，可以利用以下方法解决无法调用驱动的错误。首先，需要明确打印机是否支持专用软件输出的指令集，以及专用软件对应打印机与Nmark打印贴标机分辨率相同的打印机的USB参数，获取参数可以利用BusHound软件。确定以上信息后便可进行修改。

一.BusHound获取参数教程

1.打开BusHound软件，点击Devices，勾选打印机以及USB Printing Support。



2.点击Capture回到，点击stop清空窗口，点击run开始抓取



## Nmark Print & Apply USB Printing with Third-Party Software Guide

Because of the particularities of USB communication, calling the Nmark printer driver from other printer-specific software produces an error. When other special-purpose software must be used, the following method resolves the failure to call the driver. First, determine whether the printer supports the command set output by the special-purpose software, and the USB parameters of a printer (with the same resolution as the Nmark print & apply system) that the special-purpose software corresponds to. Use the BusHound software to obtain the parameters. After confirming the above information, modifications can be made.

### 1. BusHound parameter acquisition tutorial

1. Open the BusHound software, click Devices, and check the printer and USB Printing Support.
2. Click Capture, click Stop to clear the window, and click Run to start capturing.

*Illustration/diagram page - see the original Chinese document for the image.*

Nmark打印贴标机USB打印对接其他专用软件指导

3.重启打印机，获取到相关参数

```
CTL 80 06 0100 0000 0012 GET_DESCRIPTOR
IN 12 01 00 02 02 00 00 40 03 12 31 01 00 01 01 02@..1.....
03 01 ..
CTL 80 06 0200 0000 0109 GET_DESCRIPTOR
IN 09 02 20 00 01 01 00 80 32 09 04 00 00 02 07 01 2.....
02 00 07 05 02 02 40 00 00 07 05 82 02 40 00 00@.....@..
CTL 00 09 0001 0000 0000 SET_CONFIG
CTL 80 06 0303 0409 0103 GET_DESCRIPTOR
IN 10 03 50 00 72 00 69 00 6e 00 74 00 65 00 72 00 ..P.r.i.n.t.e.r.
CTL a1 00 0000 0000 03f1 get_device_id
IN 00 2f 4d 46 47 3a 54 53 43 3b 43 4d 44 3a 54 53 ./MFG:TSC;CMD:TS
50 4c 3b 4d 44 4c 3a 54 54 50 2d 33 34 32 20 50 PL;MDL:TTP-342 P
72 6f 3b 43 4c 53 3a 50 52 49 4e 54 45 52 3b ro;CLS:PRINTER;
CTL a1 00 0000 0000 0400 get_device_id
USTS c0010000 canceled
```

注：VID:1203 PID:0131

二.参数修改方法

1.利用Nmark打印贴标机配置工具修改 Nmark打印贴标机USB参数。  
修改方法如下：

(1) 打开Ptools软件，选择已连接的Nmark打印机，点击连接



## Nmark Print & Apply USB Printing with Third-Party Software Guide

### 2. Parameter modification method

3. Restart the printer to obtain the relevant parameters.

1. Use the Nmark print & apply configuration tool to modify the Nmark print & apply USB parameters.

Modification method:

(1) Open the Ptools software, select the connected Nmark printer, and click Connect.

*Note: VID:1203 PID:0131*

*Illustration/diagram page - see the original Chinese document for the image.*

Nmark打印贴标机USB打印对接其他专用软件指导

( 2 ) 点击USB参数，点击读取，此步骤需要超级用户权限



( 3 ) 修改USB参数为打印软件所对应的打印机的USB参数，点击设置，重启打印机即可

三.安装专用软件对应打印机的驱动

## Nmark Print & Apply USB Printing with Third-Party Software Guide

### 3. Install the driver of the printer corresponding to the special-purpose software

(2) Click USB Parameters, then click Read. This step requires super-user privileges.

(3) Change the USB parameters to those of the printer corresponding to the printing software, click Set, and restart the printer.

*Illustration/diagram page - see the original Chinese document for the image.*

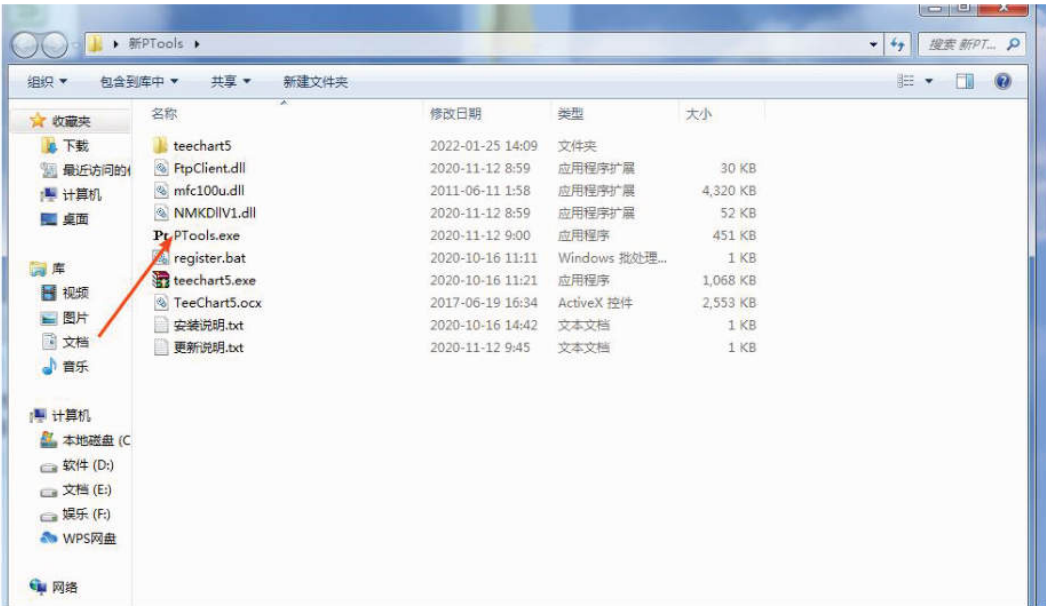
Ptools升级程序

Ptools升级程序

1.解压后，双击ptools图标



2.双击ptools图标



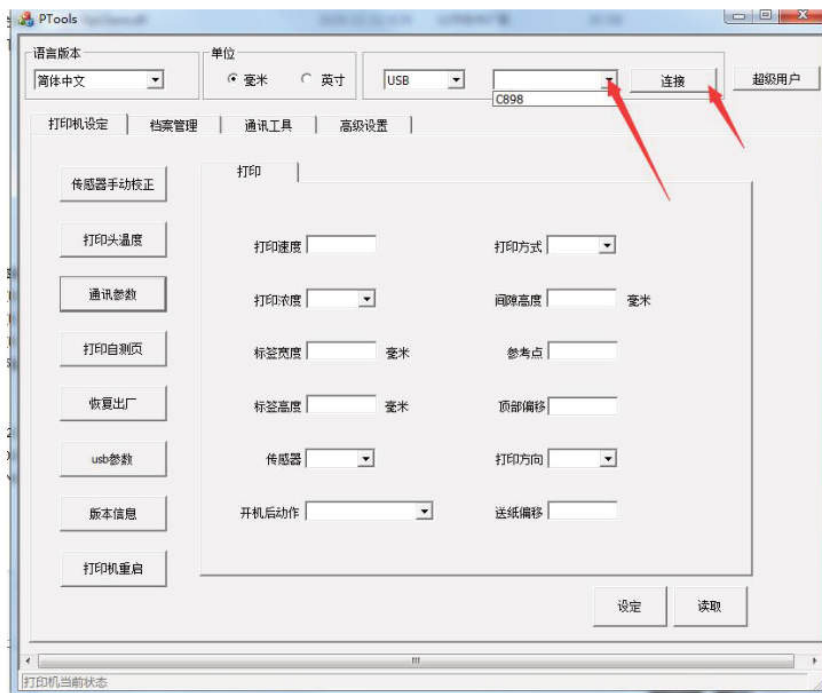
## Ptools Upgrade Program

1. After extracting, double-click the ptools icon.
2. Double-click the ptools icon.

*Illustration/diagram page - see the original Chinese document for the image.*

## Ptools升级程序

3.连接好usb线，找到机器型号，选中，点连接



4. 点击高级设置，点击打印机升级



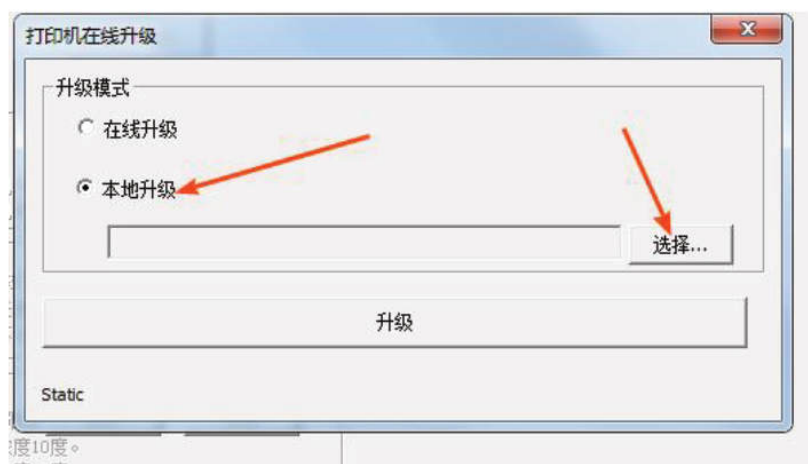
## Ptools Upgrade Program

3. Connect the USB cable, find the machine model, select it, and click Connect.
4. Click Advanced Settings, then click Printer Upgrade.

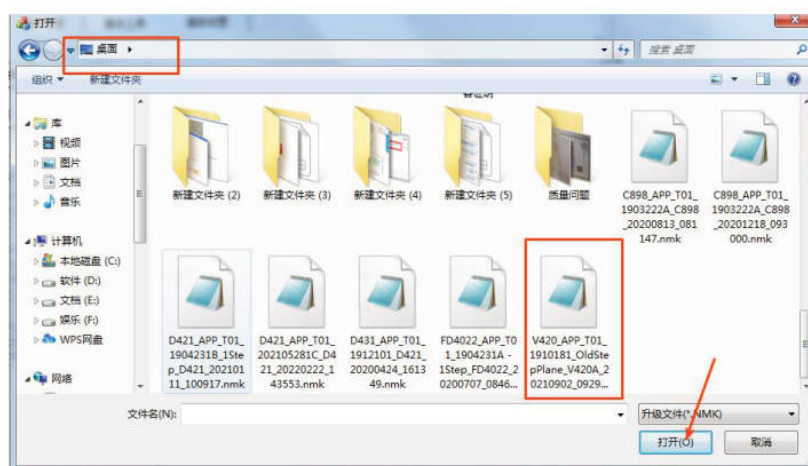
*Illustration/diagram page - see the original Chinese document for the image.*

## Ptools升级程序

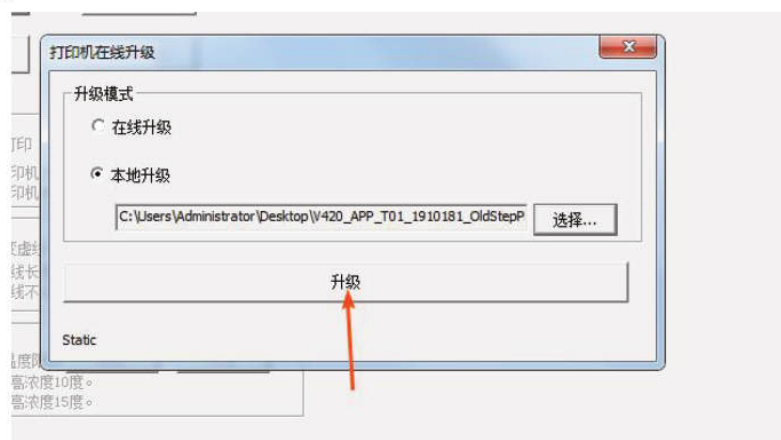
5. 点击本地升级，点击选择



6. 找到升级文件位置，点击打开



7. 点击升级



## Ptools Upgrade Program

5. Click Local Upgrade, then click Select.
6. Find the upgrade file location and click Open.
7. Click Upgrade.

*Illustration/diagram page - see the original Chinese document for the image.*

## 触摸屏Nmark打印软件使用说明

### 触摸屏Nmark打印软件使用说明

注：本文档着重介绍调用U盘文件方式打印

#### 一.软件介绍

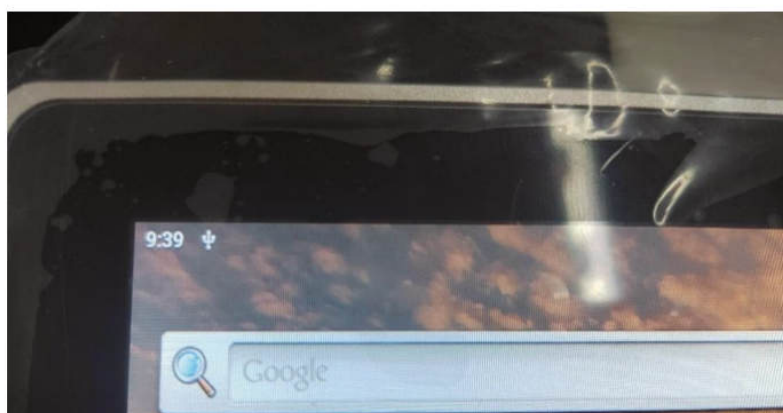
Nmark标签打印软件可以通过软件标签编辑和调用U盘内存储的标签文件两种方式进行标签打印。标签编辑方式即用户在使用时可以在触摸屏上进行标签的制作，不需要使用其他软件。调用U盘方式即用户将在电脑上用本公司开发的Barlabel标签编辑软件编辑好所需要的所有标签文件，将.BLX文件存储到U盘内，Nmark标签打印软件通过调用U盘内的文件进行打印。

#### 二.使用步骤

1.为触摸屏和Nmark打印机上电。



2.将已经存储了标签文件的U盘插在触摸屏下方的任意一个USB接口上，屏幕显示连接图标即为连接成功。



## Touchscreen Nmark Printing Software Instructions

*Note: this document focuses on printing by calling files on a USB drive.*

### 1. Software introduction

### 2. Usage steps

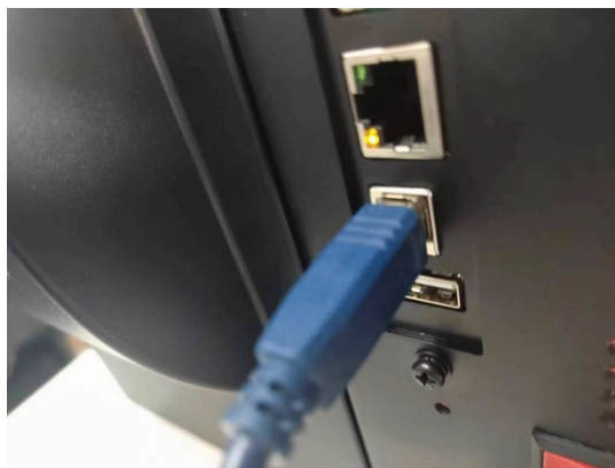
The Nmark label printing software can print labels in two ways: editing labels in the software, and calling label files stored on a USB drive. In the label editing method, the user creates labels directly on the touchscreen without using other software. In the USB-drive method, the user edits all required label files on a computer using our Barlabel label editing software, stores the .BLX files on a USB drive, and the Nmark label printing software prints by calling the files on the USB drive.

1. Power on the touchscreen and the Nmark printer.
2. Insert the USB drive that already stores the label files into any USB port under the touchscreen; when the screen shows the connection icon, the connection is successful.

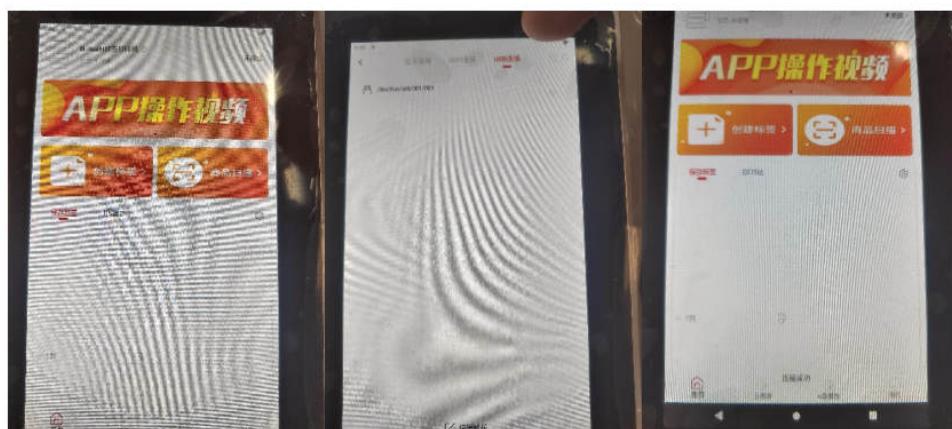
*Illustration/diagram page - see the original Chinese document for the image.*

## 触摸屏Nmark打印软件使用说明

### 3.用USB线连接触摸屏和Nmark打印机



### 4.打开Nmark标签打印软件，点击右上角未连接，选择USB连接，选择弹出的USB设备，弹出权限申请时选择确定，再次选择弹出的USB设备，下方提示连接成功。



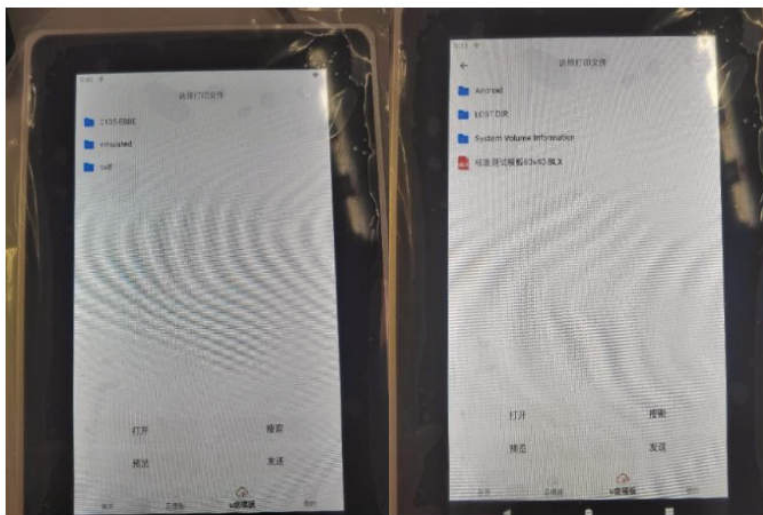
## Touchscreen Nmark Printing Software Instructions

3. Connect the touchscreen to the Nmark printer with a USB cable.
4. Open the Nmark label printing software, tap 'Not connected' in the upper right, select USB connection, and select the pop-up USB device. When the permission prompt appears, select OK, select the pop-up USB device again, and the bottom shows 'Connected'.

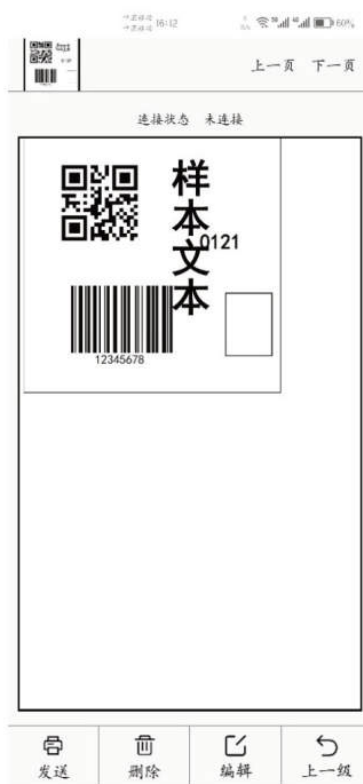
*Illustration/diagram page - see the original Chinese document for the image.*

## 触摸屏Nmark打印软件使用说明

- 5.选择U盘模板，点击名为U盘id号的文件夹，打开后即可找到存储的标签文件，选择需要打印的标签文件，点击打开，等待加载完成，点击发送打印机即可打印出需要的标签



- 6.触摸屏上对标签进行二次编辑，打开U盘中需要编辑的标签文件，点击编辑按钮，界面会自动跳转到标签编辑界面，编辑完成后需要保存标签文件，文件会自动保存在本地目录下，可以在主界面查看U盘里的标签文件不会被修改



## Touchscreen Nmark Printing Software Instructions

5. Select USB drive template, tap the folder named with the USB drive ID, open it to find the stored label files, select the label file to print, tap Open, wait for loading to complete, then tap Send to Printer to print the label.
6. Secondary editing of labels on the touchscreen: open the label file to edit on the USB drive, tap the Edit button, and the interface automatically jumps to the label editing screen. After editing, save the label file; the file is automatically saved to the local directory. The label files on the USB drive can be viewed from the main screen and are not modified.

*Illustration/diagram page - see the original Chinese document for the image.*

## 触摸屏Nmark打印软件使用说明

### 7.将U盘文件存储在触摸屏内部共有两种方法

方法1：在触摸屏软件里打开U盘里的标签文件，点击编辑，进入编辑界面，可以选择编辑或者不编辑文件，然后保存，即可将文件保存在触摸屏中。

方法2：在U盘模板界面选择需要保存在本地的标签文件，选择复制，可以选择覆盖或者跳过同名，然后在软件“我的”界面，打开我的文件即可看到保存的标签文件。

## 三.软件更新方法

需要更新软件时，打开via浏览器，打开保存的书签，即可进入更新网站，卸载旧版本，下载安装最新版本即可。

## 四.网络打印使用方法

### 1.连接网线打印

#### (1)触摸屏和打印机之间利用网线直连

打开触摸屏设置，选择网络和互联网点击以太网，选择静态IP模式，配置相关参数，网络前缀长度输入24，IP地址以及默认网关根据用户所在环境的局域网自行配置。触摸屏的IP地址必须和打印机IP地址处在同一个网段。



#### (2)触摸屏和打印机之间通过交换机或者路由器连接

这种连接方式不需要手动配置触摸屏的IP地址，交换机或路由器会自动给触摸屏分配IP地址

## Touchscreen Nmark Printing Software Instructions

7. There are two methods to store USB drive files inside the touchscreen.

Method 1: open the label file on the USB drive in the touchscreen software, tap Edit to enter the editing screen, choose whether to edit the file, then save - the file is saved in the touchscreen.

Method 2: in the USB drive template screen, select the label file to save locally, select Copy, choose to overwrite or skip the same name, then in the software's 'My' screen open My Files to see the saved label file.

### 3. Software update method

When the software needs updating, open the via browser, open the saved bookmark to enter the update site, uninstall the old version, and download and install the latest version.

### 4. Network printing usage

#### 1. Network-cable printing

(1) Direct cable connection between the touchscreen and the printer: open the touchscreen settings, select Network & Internet, tap Ethernet, select Static IP mode, configure the relevant parameters; set the network prefix length to 24; set the IP address and default gateway according to the LAN of the user's environment. The touchscreen IP address must be on the same network segment as the printer IP address.

(2) Connection between the touchscreen and the printer through a switch or router: this connection does not require manual configuration of the touchscreen IP address; the switch or router automatically assigns an IP address to the touchscreen.

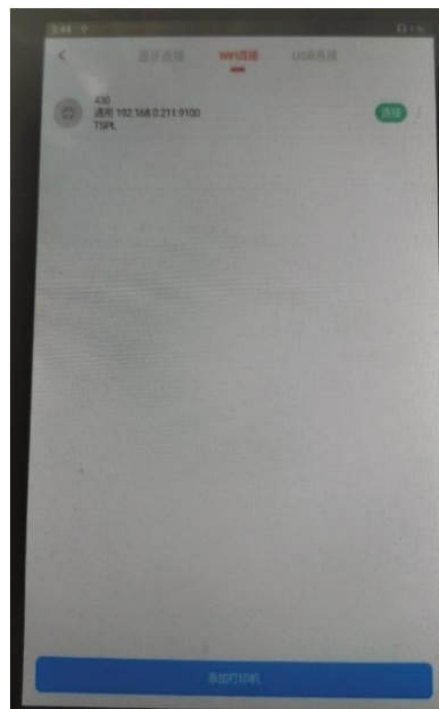
## 触摸屏Nmark打印软件使用说明

### 2.利用WIFI进行打印

将打印在路由器上，触摸屏连接该路由器的WIFI。

打开Nmark标签打印软件，点击右上角未连接，点击WIFI连接，添加打印机，输入打印机名称、IP地址以及端口号，打印机默认端口号为9100.点击确定。列表中出现新增的打印机即可。

点击连接，等待软件返回首页。



## Touchscreen Nmark Printing Software Instructions

### 2. Printing via WiFi

Connect the printer to the router, and connect the touchscreen to that router's WiFi.

Open the Nmark label printing software, tap 'Not connected' in the upper right, tap WiFi connection, add a printer, enter the printer name, IP address and port (the printer's default port is 9100), and tap OK. The new printer then appears in the list. Tap Connect and wait for the software to return to the home screen.

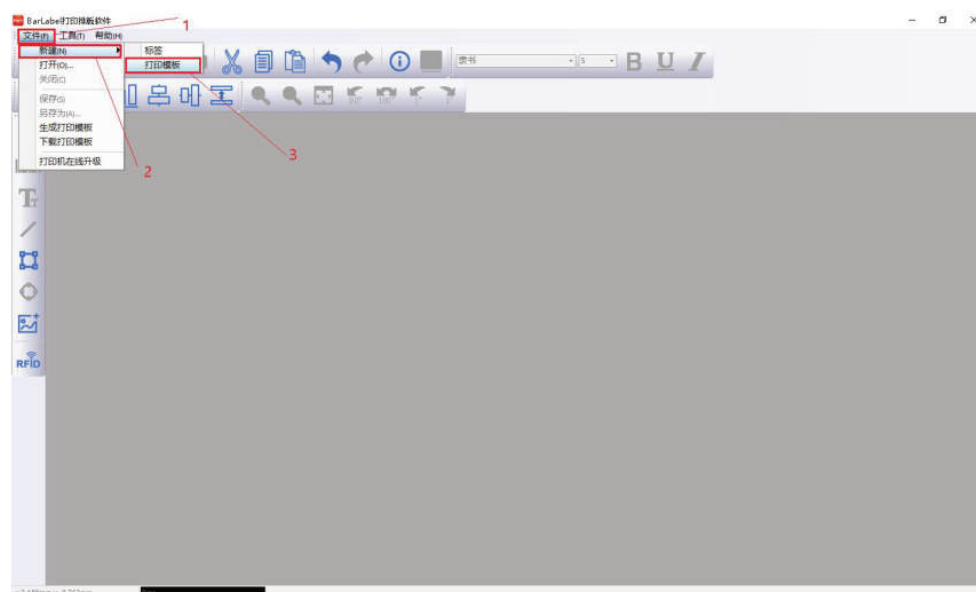
*Illustration/diagram page - see the original Chinese document for the image.*

## Barlabel打印模板制作与调用功能说明

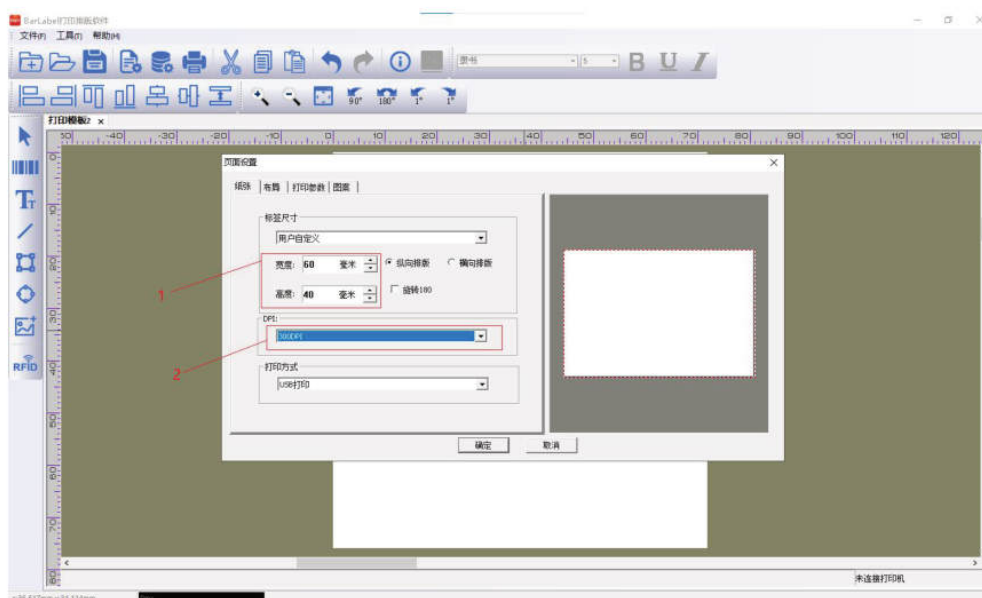
### Barlabel打印模板制作与调用功能说明

#### 一.新建模板

打开Barlabel软件，点击文件，新建，打印模板



双击空白区域，修改模板宽度和高度、分辨率、打印方式。



利用左边的控件进行模板编辑。

## Barlabel Print Template Creation & Invocation

### 1. Create a new template

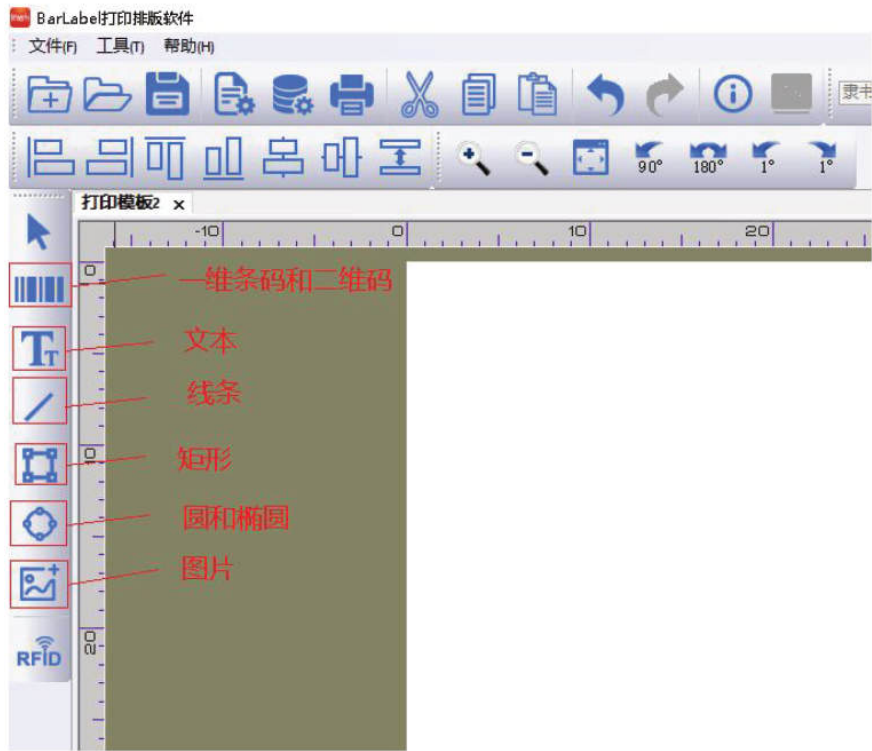
Open the Barlabel software, click File > New > Print Template.

Double-click the blank area to modify the template width and height, resolution, and print method.

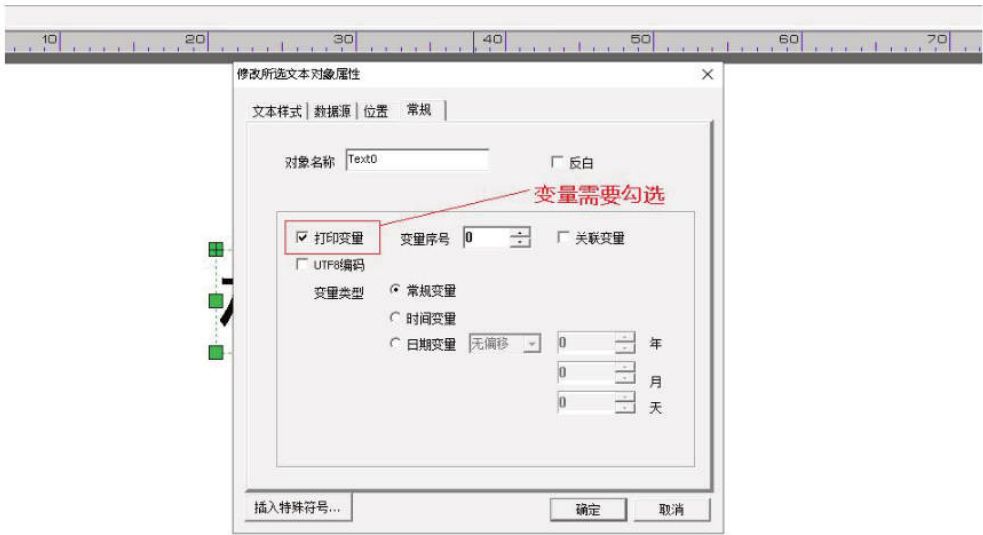
Use the controls on the left to edit the template.

*Illustration/diagram page - see the original Chinese document for the image.*

Barlabel打印模板制作与调用功能说明



放置好内容后，可双击修改内容的具体属性，如果该项为变量，需要在常规中勾选打印变量



排版完成后点击文件，生成打印模板，编辑文件名称，保存即可

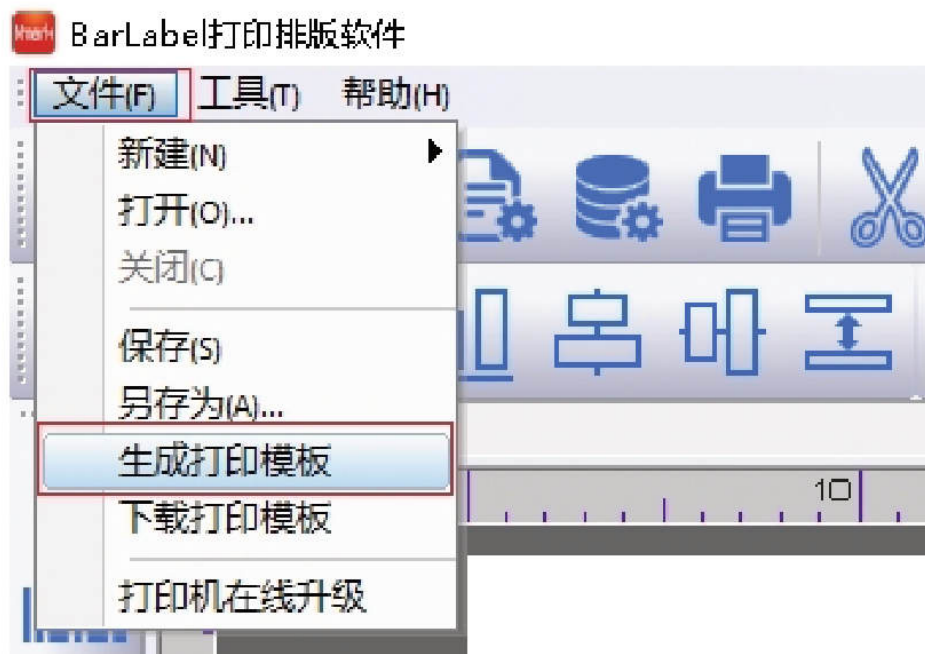
## Barlabel Print Template Creation & Invocation

After placing the content, double-click to modify the specific properties of the content. If the item is a variable, check 'Print variable' under General.

After the layout is complete, click File > Generate Print Template, edit the file name, and save.

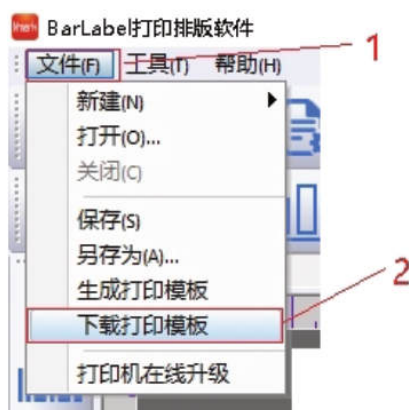
*Illustration/diagram page - see the original Chinese document for the image.*

## BarLabel打印模板制作与调用功能说明



## 二.下载模板

用USB或者网线连接打印机，如果通过网络下载，需要确保打印机与电脑处于同一局域网。  
打开BarLabel软件,点击文件，下载打印模板，选择生成的同名FRM文件，根据自己的通信接口，点击下载即可



## Barlabel Print Template Creation & Invocation

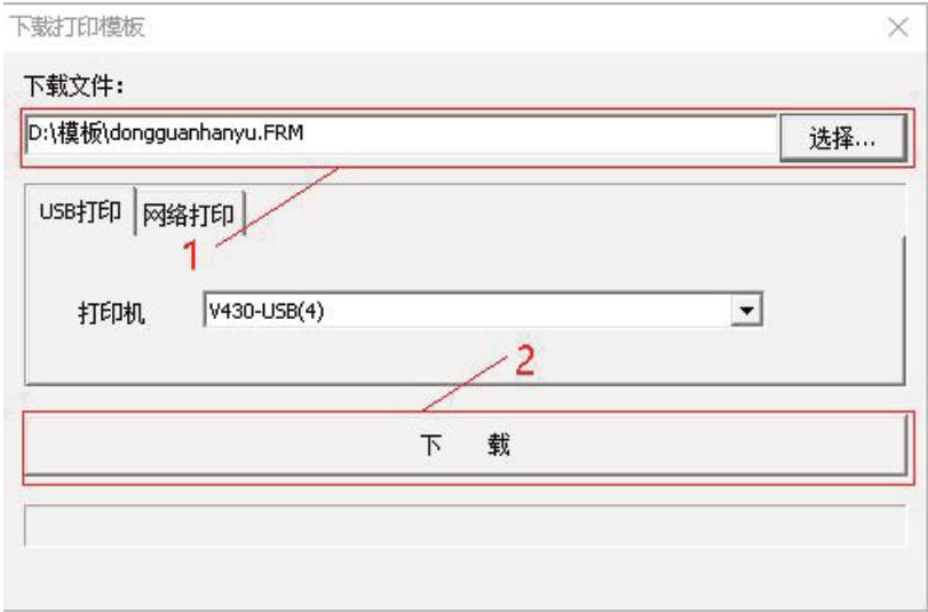
### 2. Download a template

Connect the printer with a USB cable or network cable. For network download, ensure the printer and the computer are on the same LAN.

Open the Barlabel software, click File > Download Print Template, select the generated FRM file with the same name, and click Download according to your communication interface.

*Illustration/diagram page - see the original Chinese document for the image.*

Barlabel打印模板制作与调用功能说明



提示下载完成



模板下载成功后，需要在打印机上选择需要打印的模板，并设置触发模式，同时需要在打印机菜单，系统设置，软件设置下设置打印机触发模式，选择打印模板的方式如下。  
菜单键进入打印机菜单，进入模板打印选项。



选择“模板”行，按“确认”键，可进入模板列表，选择需要脱机打印的模板。  
选择“模式”行，按“确认”键，可进入模式列表，共有4种模式可以选择，FR指令、协议数据、IO信号、条码扫描。  
FR指令：本公司自定义调用打印模板的专用指令。  
协议数据：特殊协议  
IO信号：外部IO接口接收的信号，需要在贴标臂菜单中将需要使用的外部接口使能。  
条码扫描：通过连接在打印机后面板的USB扫码枪进行触发。  
说明：打印机非脱机模式下，必须把“模式”改为“FR指令”

## Barlabel Print Template Creation & Invocation

After the template downloads successfully, select the template to print on the printer and set the trigger mode. Also set the printer trigger mode under Printer Menu > System Settings > Software Settings. The way to select the print template is as follows.

Press the Menu key to enter the printer menu and enter the Template Printing option.

Select the 'Template' row and press the OK key to enter the template list; select the template for offline printing.

Select the 'Mode' row and press the OK key to enter the mode list. Four modes are available: FR command, protocol data, IO signal, and barcode scan.

FR command: our proprietary command for invoking a print template.

Protocol data: special protocol.

IO signal: a signal received by the external IO interface; the external interface to use must be enabled in the Labeling Arm menu.

Barcode scan: triggered by a USB barcode scanner connected to the printer's rear panel.

*Note: in non-offline mode, 'Mode' must be changed to 'FR command'.*

*Prompt: download complete.*

Barlabe1打印模板制作与调用功能说明

调用模板有在线调用和脱机调用两种方式。  
在线调用即通过电脑上位机发送调用指令，打印机收到指令后，找到打印机内部对应的模板文件或打印机后面板USB\_HOST接口连接的U盘中的模板文件（部分机型支持），并将指令代码中的内容赋值给打印模板中的变量。  
脱机调用依托外部信号，可使用外部IO接口触发或扫码枪触发。变量内容可以利用键盘编辑。

三.调用模板

- 1.在线调用  
打印机支持USB、TCP、RS232三种通讯方式，调用命令格式如下  
FR"TEST.FRM" 表示调用模板的名字，后面需要跟回车换行("\r\n")  
? 固定格式，必须有，后面需要跟回车换行("\r\n")  
数据1 第一个变量的数据，后面需要跟回车换行("\r\n")  
数据2 第二个变量的数据，后面需要跟回车换行("\r\n")  
数据3 第三个变量的数据，后面需要跟回车换行("\r\n")  
P1,1 表示启动打印，固定格式，必须有，后面需要跟回车换行("\r\n")  
说明：如果模板还有多个变量，可在第五行和第六行之间顺序插入，每个变量后面需要跟回车换行("\r\n")，指令中的?以及""必须在英文输入法下输入。
- 2.脱机调用  
模板触发模式选择IO信号或者条码扫描即可实现脱机调用，脱机调用修改模板内容可使用键盘进行修改。  
在利用Barlabe1建立打印模板时，常规变量会按照建立顺序自动排序，时间变量和日期变量不参与排序，建立好模板后，将模板文件下载到打印机中，按照描述的选择模板的方式选择需要打印的打印模板。在变量菜单中按照模板中变量的顺序在初值位置利用键盘输入变量内容，可以根据模板中的变量类型在打印机中选择变量类型。
- 3.删除模板  
模板中有时间和日期变量时，只需在模板变量列表中添加时间变量和日期变量即可，无需考虑顺序。
- 选择“模板”行，按“确认”键，可进入模板列表，选择需要删除的打印模板，选择删除，确认删除即可。



## Barlabel Print Template Creation & Invocation

### 3. Invoke a template

#### 1. Online invocation

The printer supports three communication methods: USB, TCP and RS232. The invocation command format is as follows:

```
FR'TEST.FRM' // the name of the template to invoke, followed by CRLF ('\r\n')
? // fixed format, required, followed by CRLF ('\r\n')
Data 1 // data of the first variable, followed by CRLF ('\r\n')
Data 2 // data of the second variable, followed by CRLF ('\r\n')
Data 3 // data of the third variable, followed by CRLF ('\r\n')
P1,1 // means start printing; fixed format, required, followed by CRLF ('\r\n')
```

Note: if the template has more variables, insert them in order between the fifth and sixth lines; each variable is followed by CRLF ('\r\n'). The '?' and the quotes in the command must be entered in English input mode.

#### 2. Offline invocation

Selecting IO signal or barcode scan as the template trigger mode enables offline invocation. For offline invocation, the template content can be modified using the keyboard.

When creating a print template in Barlabel, regular variables are automatically sorted in creation order; time variables and date variables do not participate in the sorting. After creating the template, download the template file to the printer, and select the print template to print as described above. In the Variable menu, enter the variable content at the initial-value position using the keyboard in the order of the template's variables, and select the variable type on the printer according to the variable type in the template.

When the template has time and date variables, simply add the time variable and date variable to the template variable list; the order need not be considered.

#### 3. Delete a template

Select the 'Template' row and press the OK key to enter the template list, select the print template to delete, select Delete, and confirm the deletion.

There are two invocation modes: online invocation and offline invocation.

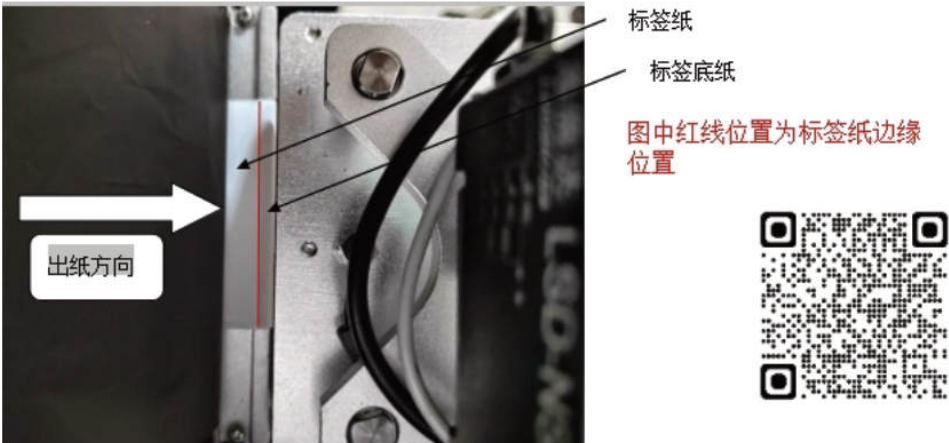
Online invocation sends the invocation command from the computer host. After the printer receives the command, it finds the corresponding template file inside the printer, or the template file on the USB drive connected to the printer's rear-panel USB\_HOST port (supported on some models), and assigns the content in the command code to the variables of the print template.

Offline invocation relies on external signals; it can be triggered by an external IO interface or a barcode scanner. The variable content can be edited with the keyboard.

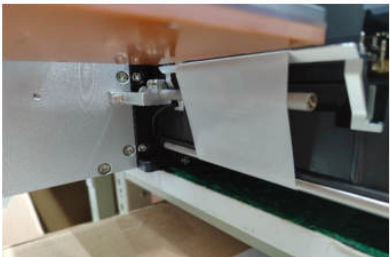
# 附录

## 附录一 常见问题及解决方法

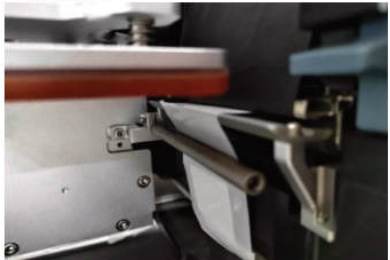
1. 标签打印完成后，标签未停留在贴标板上，贴标机提示标签丢失报警？
- 1.1 观察标签打印停止的位置是否正确？标签打印停止的位置，应该是下一张标签的边缘在剥离片的后面1mm左右，如果位置相差太大，需要调整进纸偏移，进纸偏移默认是27mm,调整方法参考《打印贴标机使用说明》或视频二维码。



- 1.2 检查吹气管是否被遮挡，或者吹气角度不合适。调整方法参考《打印贴标机使用说明》或视频二维码。
- 错误装纸：



正确装纸：



## Appendix

### Appendix 1: Common Problems & Solutions

1. After label printing completes, the label does not stay on the labeling plate, and the labeling machine reports a 'label lost' alarm.

1.1 Check whether the label print stop position is correct. The stop position should be about 1 mm behind the peel-off plate for the edge of the next label. If the position differs too much, adjust the feed offset (default 27 mm); see the Print & Apply System User Manual or the video QR code for the adjustment method.

1.2 Check whether the blow tube is blocked or the blow angle is unsuitable; see the Print & Apply System User Manual or the video QR code for the adjustment method.

*Incorrect media loading:*

*Correct media loading:*

## 附录

- 1.3 真空是否足够和有效,吸标不稳考虑适当的增加或减少气孔的个数。如果标签过大,需要考虑调整真空大小,减小真空形成的范围防止吸力过大,标签不能顺利推出。
- 1.4 通过屏幕菜单调整延时回卷的大小(部分机型为真空延时)。
- 1.5 标签是否符合要求,标签要选择贴标用的标签纸,不可伤到标签底纸,且标签地址不宜太厚。
- 1.6 纸张类型设置使用反射传感器。
- 1.7 贴标板高低不合适或不平行
- 1.8 剥离不稳定,回卷轴转动不稳,回卷轴的摩擦片压力需要增加,或者需要更换了
- 1.9 气压太低,导致贴标板区域无法形成有效真空,标签因重力掉落。
- 2. 打印内容位置不准怎么调整?
- 2.1 可以通过屏幕菜单,调整打印机的X轴偏移和Y轴偏移。参考《打印贴标机使用说明》或视频二维码。



- 2.2 校正一下传感器参数
- 2.3 设置纸张类型反射传感器
- 2.4 如果是打开打印头,就要多走几个标签,让打印机适应一下
- 3. 换了不同尺寸的标签,打印和贴标的位置不准?
- 3.1 更换标签后打印机无法立即将传感器阈值自动调整到合适范围,需要打印5,6个标签打印贴标机才会适应。然后打印贴标机就可以正常工作了。
- 3.2 需打印的标签尺寸与模板的尺寸不一致。
- 4. 怎样调整贴标的速度?
- 可以通过调整气缸的进气和出气气量来调整。参考打印贴标机使用说明或视频二维码。



- 5. 打印机不识别纸张出现黑标错误怎么办?
- 5.1 手动拿走标签后按清除/返回按键多打印几个标签看看。
- 5.2 没有打印纸了。
- 5.3 标签纸有缺失,或者标签纸之前的缝隙没有了。
- 5.4 标签尺寸设置的过小。
- 5.5 在菜单里面校正纸张,测试曲线和高低参数值
- 6. 贴标打印机io如何输出?
- 6.1 触发打印后,打印开始并输出24V高电平,打印完成输出低电平。
- 6.2 触发贴标后,贴标开始并输出24V高电平,贴标完成输出低电平。
- 6.3 详情请参考打印贴标机操作手册。
- 7. 不希望软件改变贴标机参数怎么办?
- 7.1 如果所有的参数都不允许修改可以将打印机的打印模式修改为打印机模式,即在打印机上将所有的参数锁死。



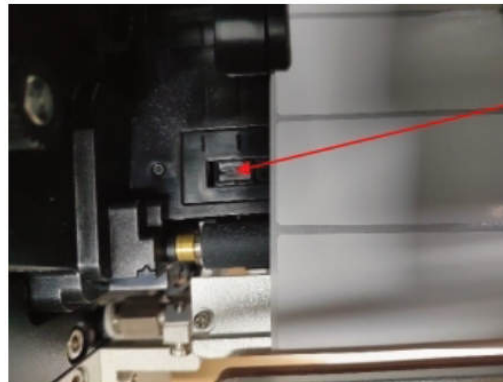
## Appendix

- 1.3 Check whether the vacuum is sufficient and effective. If label pickup is unstable, consider increasing or decreasing the number of air holes. If the label is too large, consider adjusting the vacuum size and reducing the area the vacuum covers, to prevent excessive suction that keeps the label from being pushed out smoothly.
- 1.4 Adjust the delayed-rewind value through the screen menu (on some models it is the vacuum delay).
- 1.5 Check whether the label meets the requirements. Choose label stock intended for labeling, do not damage the label liner, and the label should not be too thick.
- 1.6 Set the media type to use the reflective sensor.
- 1.7 The labeling plate height is unsuitable or not parallel.
- 1.8 Unstable peel-off; the rewind shaft rotates unsteadily; the friction pad pressure of the rewind shaft needs to be increased, or the pad needs replacing.
- 1.9 The air pressure is too low, so the labeling plate area cannot form an effective vacuum and the label drops due to gravity.
2. How to adjust inaccurate print content position?
  - 2.1 Adjust the printer's X-axis offset and Y-axis offset through the screen menu. See the Print & Apply System User Manual or the video QR code.
  - 2.2 Calibrate the sensor parameters.
  - 2.3 Set the media type to reflective sensor.
  - 2.4 If the printhead has been opened, feed several more labels to let the printer adapt.
3. After changing to a different label size, the print and labeling positions are inaccurate.
  - 3.1 After changing labels, the printer cannot immediately adjust the sensor threshold to the correct range automatically; print 5 or 6 labels for the print & apply system to adapt, after which it works normally.
  - 3.2 The label size to be printed is inconsistent with the template size.
4. How to adjust the labeling speed?
 

Adjust it by changing the intake and exhaust air flow of the cylinder. See the Print & Apply System User Manual or the video QR code.
5. What to do when the printer does not recognize the media and reports a black mark error?
  - 5.1 Manually remove the label, then press the Clear/Return key and print a few more labels to observe.
  - 5.2 There is no print paper left.
  - 5.3 The label stock has gaps, or the gap between label stock is gone.
  - 5.4 The label size is set too small.
  - 5.5 Calibrate the media in the menu, and test the curve and the high/low parameter values.
6. How does the print & apply IO output work?
  - 6.1 After triggering printing, printing starts and outputs a 24 V high level; when printing completes it outputs a low level.
  - 6.2 After triggering labeling, labeling starts and outputs a 24 V high level; when labeling completes it outputs a low level.
  - 6.3 See the print & apply operation manual for details.
7. What to do if the software should not change the labeling machine parameters?
  - 7.1 If no parameters may be modified, change the printer's print mode to 'printer mode', i.e. lock all the parameters on the printer.

## 附录

- 7.2如果不允许部分参数被修改，可以将打印模式指令集方式下不希望改变的参数锁定。
- 8.打印数据发送了，打印机不打印？
- 8.1 观察打印机屏幕是否显示"等待打印数据",如果显示"等待打印数据"则打印数据并没有发送过来。
- 8.2打印机屏幕如果显示"等待打印信号",则需要触发打印IO信号。
- 8.3 打印机屏幕是否有显示报错提示，打印机必须在无错状态才能正常打印。
- 8.4如果是采用打印机驱动，需要了解打印机驱动安装是否正确
- 8.4 检查连接线是否有问题。
- 8.5 如果数据灯闪了，说明数据过来了，打印机没有解析，查看打印机目前选择的指令集是否正确,一般采用NSCL指令集。
- 8.6如果是网口连接，查看打印机网口配置是否正确。
- 9.碳带报错什么原因？
- 9.1 后部碳带轴管没有安装好。
- 9.2 碳带用完。
- 9.3 扣合打印头的时候没有将碳带拉紧一些。
- 10.缺纸报错
- 10.1 传感器位置太偏，标签纸没有遮挡传感器。



传感器

- 10.2 标签纸用完或中间缺失部分标签纸。
- 10.3 标签纸比较透光，需要校正传感器的参数。
- 11.耗材如何安装操作
- 11.1 安装碳带和纸卷时，按下卡扣开关打开打印头，将标签纸卡在卡纸片之间，将色带未使用部分安装在下面，使用过的部分安装在上边。
- 11.2 更换标签纸时，首先打开打印头部分，用手前推右侧挡纸片上的卡扣，将两侧挡纸片分开，拿出旧纸，将新纸放好后，利用挡纸片卡住标签纸。
- 12.如何安装打印机驱动？
- 可以用USB接口驱动，也可以用网口驱动，USB驱动只要按照我们提供的打印机驱动程序，按照提示安装就可以了，网口驱动需要配置打印机的网口参数ip地址和端口，这可以通过打印机按键和屏幕显示来设置。我们的打印机驱动兼容 win7 和 win10。安装方法参考右侧二维码。



## Appendix

- 7.2 If only some parameters must not be modified, lock the parameters that should not be changed under the command-set print mode.
8. Print data was sent but the printer does not print.
  - 8.1 Check whether the printer screen shows 'Waiting for print data'; if it does, the print data has not been sent.
  - 8.2 If the printer screen shows 'Waiting for print signal', the print IO signal needs to be triggered.
  - 8.3 Check whether the printer screen shows an error message; the printer must be error-free to print normally.
  - 8.4 If a printer driver is used, check whether the printer driver is installed correctly.
  - 8.4 Check whether the connection cable has a problem.
  - 8.5 If the data LED flashes, the data has arrived but the printer did not parse it; check whether the currently selected command set is correct (the NSCL command set is generally used).
  - 8.6 For a network connection, check whether the printer's network port configuration is correct.
9. What causes a ribbon error?
  - 9.1 The rear ribbon core is not installed properly.
  - 9.2 The ribbon is used up.
  - 9.3 The ribbon was not pulled tight when closing the printhead.
10. Out-of-paper error
  - 10.1 The sensor position is too far off; the label stock does not cover the sensor.
  - 10.2 The label stock is used up or has a gap in the middle.
  - 10.3 The label stock is too translucent; the sensor parameters need calibrating.
11. How to install consumables
  - 11.1 When installing the ribbon and the media roll, press the latch switch to open the printhead, place the label stock between the media guide plates, install the unused ribbon at the bottom, and install the used ribbon at the top.
  - 11.2 When replacing the label stock, first open the printhead, push the latch on the right media guide plate forward to separate the two guide plates, take out the old media, place the new media, and clamp the label stock with the guide plates.
12. How to install the printer driver?

Both the USB interface driver and the network port driver can be used. For the USB driver, just follow the prompts of our printer driver to install it. For the network driver, configure the printer's network port IP address and port, which can be set through the printer keys and screen display. Our printer driver is compatible with Win7 and Win10. See the QR code on the right for the installation method.

## 附录

## 13. 打印机驱动如何设置? (参考右侧二维码)

- 13.1 设置打印页面, 注意打印方向。
- 13.2 设置进纸偏移。
- 13.3 设置关闭双向支持。
- 13.4 设置直接打印选择。



## 14. 打印机支持的编程语言是什么意思?

要想让打印机完美打印您想要的图像, 必须要一种描述这个图像的语言告诉打印机, 这种语言就是打印机支持的指令集, 目前我们支持的打印机语言有 NSCL 和 TPL, 具体内容可以找 Nmark 技术支持索取。

## 15. 打印机硬件模板文件是什么?

打印机模板文件是根据指令集自动生成的一段打印特定标签内容的字符串, 其中可变的内容, 不能是图像, 而是具体的变量内容, 后期在编程的时候, 将这些内容替换掉, 就变成了你想要打印的内容。

## 16. 为什么打印机软件模板文件推荐用 TPL 指令集?

NSCL 指令集在描述图像的时候是二进制数, 如果用一些文本编辑工具, 打开以后一些数据会被修改。而 TPL 的非压缩模式, 图像数据可以用文本字符来描述, 所以你可以用记事本这类普通的编辑软件, 对模板进行浏览和局部修改。

## 17. 打印软件 barlabel、nicelabel、bartender 有什么区别, 怎么使用?

17.1 barlabel 是深圳艾维码自己研发的打印软件, 使用该软件, 你不需要安装驱动, 该软件可以自动识别我们的打印机, 可以直接编辑标签打印使用。

17.2 nicelabel 是一个和我们合作的第三方打印软件厂商, 我们的打印机标准驱动也是 nicelabel 开发的。您可以到 nicelabel 官网了解更多 nicelabel 软件的知识。

17.3 bartender 也是一个第三方的打印软件厂商, 和我们没有直接的合作, 您可以直接安装我们的打印机驱动, 然后用 bartender 来调用。有些原来调用打印机驱动打印打印机的网口参数 IP 地址和端口, 这可以通过打印机按键和屏幕显示来设置。我们的打印机驱动兼容 win7 和 win10。

## 18. 小标签贴标注意事项是什么? 气压太小吸不住, 贴标的时候容易跑偏, 一般是 0.4 到 0.5MP 的气压。

问题: 打印机偶尔有乱码, 或不正常? 答: 检查打印机驱动的双向支持是否打开, 如果打开请关闭。

问题: 打印机驱动更改以后不起作用?

答: 看看是不是有打印机驱动的副本, 如果有副本, 需要将参数都改掉。

## 20. 标签识别传感器怎么设置(视频)

## 21. 贴标臂传感器 S1 S2 S3 的作用(视频)



## 22. 打印机走纸出现随机的不准的原因?

22.1 打印机内部的卡纸滑块太紧, 导致标签纸走不顺可以放松卡纸滑块。

22.2 回卷轴拉力太大, 导致标签纸被拉伸过多, 可以调整回卷轴摩擦弹簧压力。

## 23. 标签纸偶发剥离不良

23.1 更换适合剥离的标签纸

23.2 增加回卷轴摩擦片压力, 增加标签底纸压力。

23.3 回卷轴摩擦片受损更换摩擦片

## 24. 打印贴标机气压如何检查

24.1 气压不足时声音会明显变化, 检查进气三联件气表指针所指的位置, 正常使用过程中气压应达到 0.5

## 25. 打印贴标机同时出现好几张标签如何处理

25.1 检查贴标机打印参数中的纸张类型和使用的标签类型是否一致。

25.2 检查打印参数中设置的标签大小。

25.3 在打印机上进行传感器校正。

## 26. 打印机接收数据后无任何响应

在菜单出厂设置中找到调试模式, 检查打印机接收的数据是否与下发的数据是否一致。

## Appendix

13. How to configure the printer driver? (See the QR code on the right.)
  - 13.1 Set the print page, and note the print direction.
  - 13.2 Set the feed offset.
  - 13.3 Disable bidirectional support.
  - 13.4 Select direct printing.
14. What does 'programming language supported by the printer' mean?  
To make the printer perfectly print the image you want, a language describing that image must tell the printer what to print. This language is the command set supported by the printer. Currently the printer languages we support are NSCL and TPL; contact Nmark technical support for the specific content.
15. What is the printer hardware template file?  
The printer template file is a string automatically generated from the command set to print the content of a specific label. Its variable content is not an image but specific variable values; when programming later, these contents are replaced and become the content you want to print.
16. Why is the TPL command set recommended for printer software template files?  
The NSCL command set describes images as binary data; if opened with some text editing tools, some of the data will be modified. By contrast, TPL's non-compressed mode can describe image data with text characters, so you can use an ordinary editor such as Notepad to browse and partially modify the template.
17. What are the differences between the printing software barlabel, nicelabel and bartender, and how are they used?
  - 17.1 Barlabel is a printing software developed by Shenzhen Aiweima itself. With this software you do not need to install a driver; it can automatically recognize our printers and directly edit and print labels.
  - 17.2 NiceLabel is a third-party printing software vendor that we cooperate with; our standard printer driver is also developed by NiceLabel. You can visit the NiceLabel official website to learn more about NiceLabel.
  - 17.3 BarTender is also a third-party printing software vendor with which we have no direct cooperation. You can install our printer driver and call it from BarTender. For some printers called through the driver, the network port IP address and port can be set through the printer keys and screen display. Our printer driver is compatible with Win7 and Win10.
18. Precautions for small-label labeling: if the air pressure is too low the label cannot be held and labeling tends to drift; the air pressure is generally 0.4 to 0.5 MPa.  
Q: The printer occasionally produces garbled characters or behaves abnormally. A: Check whether bidirectional support in the printer driver is on; if it is, turn it off.  
Q: Changes to the printer driver do not take effect? A: Check whether there is a duplicate of the printer driver; if there is, change all the parameters there as well.
20. How to set the label detection sensor (video).
21. The functions of labeling arm sensors S1, S2, S3 (video).
22. Why does the printer feed with random inaccuracy?
  - 22.1 The media clamp slider inside the printer is too tight, so the label stock does not feed smoothly; loosen the clamp slider.
  - 22.2 The rewind shaft tension is too high, causing the label stock to be over-stretched; adjust the friction spring pressure of the rewind shaft.
23. Occasional poor label peel-off
  - 23.1 Replace with label stock suitable for peeling.
  - 23.2 Increase the friction pad pressure of the rewind shaft and the label liner pressure.
  - 23.3 If the friction pad of the rewind shaft is damaged, replace it.
24. How to check the print & apply system air pressure
  - 24.1 When the air pressure is insufficient the sound changes noticeably; check the position of the gauge pointer of the air inlet triplet. During normal use the air pressure should reach 0.5 MPa.
25. How to handle several labels appearing at once
  - 25.1 Check whether the media type in the labeling machine's print parameters matches the label type in use.
  - 25.2 Check the label size set in the print parameters.
  - 25.3 Perform sensor calibration on the printer.
26. The printer does not respond after receiving data  
In Factory Settings, find Debug Mode and check whether the data received by the printer matches the data sent.

## 注意事项

### 附录二 注意事项

1. 在使用任何型号的打印机时，必须确保电源接地。
2. 各种产品在使用时必须定期维护，打印头和传感器定期使用酒精擦拭，机械结构在长期使用过程中可能会出现松动，需要紧固。
3. 贴标机在使用过程中，由于贴标板上的气孔数量按照预定时的标签大小决定，在更换小的标签纸后，可能会出现标签纸无法吸附在贴标板上，需要将多余的气孔堵住。
4. 当打印内容偏移时，需要适当调整坐标偏移。
5. 打印机每次设置完网络参数后，需要关机重启才能保存网络参数。
6. 安装打印机驱动后，必须在打印机属性中将打印机端口双向支持关闭。不关闭双向支持，打印机接收打印任务后可能会报错。
7. 修改贴标臂参数时需要先关机，按住菜单键开机，否则贴标臂参数未锁定状态无法修改。
8. 安装标签纸时，必须确保便签纸卡在挡纸块中间，否则打印过程中标签纸会跑偏，导致打印位置偏移或出现缺纸报警。

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## Appendix

### Appendix 2: Precautions

1. When using any printer model, ensure the power supply is grounded.
2. All products must be maintained regularly during use. Wipe the printhead and sensor with alcohol regularly. Mechanical structures may loosen during long-term use and need tightening.
3. During use of the labeling machine, because the number of air holes on the labeling plate is determined by the label size at the time of ordering, after changing to smaller label stock the label may fail to be held on the labeling plate; block the excess air holes.
4. When the print content is offset, adjust the coordinate offset as appropriate.
5. After setting the network parameters, the printer must be powered off and restarted to save them.
6. After installing the printer driver, bidirectional support must be disabled in the printer port settings of the printer properties. If bidirectional support is not disabled, the printer may report an error after receiving a print job.
7. When modifying labeling arm parameters, power off first and hold the Menu key while powering on; otherwise the labeling arm parameters (in the unlocked state) cannot be modified.
8. When installing label stock, ensure the label stock is clamped in the middle of the media guide blocks; otherwise the label stock will drift during printing, causing print position offset or an out-of-paper alarm.

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