

Nmark Print & Apply System Ethernet Port User Guide

Bilingual Edition

English translation with original Chinese pages

Nmark 打印贴标机网口使用说明

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。

概述

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，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，打印贴标机共有两个网络端口，分别是 9100 和 9200，9100 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。

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。



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

Overview

The Ethernet port on the rear panel has three uses: template download, network printing and status feedback. This guide explains each use.

Before using the Ethernet port, make sure the print & apply system and the host computer are on the same network segment. The factory default IP address is 192.168.1.69 and the port is 9100. Users can set the IP address and local port under System Settings > Communication Interface > Network Interface. The system has two network ports: 9100 and 9200. Port 9100 is used for receiving print data, downloading print templates and receiving control commands. Port 9200 is mainly used for status output.

Usage

1. Template Download

Create a print template with Barlabel label editing software. For the template download method, select Network Printing, select the template file (.FRM), enter the IP address and port of the print & apply system, and download the template through the Ethernet port.

When using the FR command to call a template, the FR command can also be sent over the Ethernet port.

2. Network Printing

Network printing can be divided into direct printing and driver-based printing. Direct printing sends the print content as a command set over TCP/IP to the system. The printer uses a server-side persistent TCP/IP connection. Driver-based printing requires installing the Nmark printer driver and sending label data through the driver.

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）。

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

2.1 Direct Printing

Users can edit labels with Barlabel label editing software. The software can print labels without installing a driver. Select Network Printing, enter the printer IP address and port, and send label data through the Ethernet port.

2.2 Driver-Based Printing

Install the network driver for the corresponding print & apply model (refer to the Nmark Print & Apply System Driver Installation Guide) and send print data through the network driver.

3. Status Feedback

Users can monitor the print & apply system status through port 9200. After the software connects to the printer, it sends commands or print data that the printer can recognize. The printer executes the command or prints the label data. The software then receives the returned information and obtains the fault information after a successful or failed print.

Returned Fault Information

0x7B 0xFF 0xFF 0x00 0x04 0x7C 0x00 0x00 0x00 0x00 0x7D

This is a typical status message returned after printing (0x indicates hexadecimal data).

byte0: Start-of-data flag

byte1, byte2: 0xFFFF printing in progress; 0xFFFE print complete; 0xFFFD labeling complete; 0xFFFC printer idle

byte3, byte4: Length of the printer status data (0x00 0x04)

byte5: Separator character

byte6-byte9: Correspond to bit31-bit0. A bit set to 1 indicates a specific printer error state.

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。

bit0: Print paused

bit1: Printhead lifted

bit2: Out of paper

bit3: Ribbon error

bit4: Ribbon missing

bit5: Black mark error

bit6: Printhead over-temperature

bit7: Printhead voltage too low

bit8: Print data error

bit9: Cutter error

bit10: Program reset and restart

bit11: Labeling arm error

byte10: End-of-data flag

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