

Desktop POS Printer Wi-Fi Operation Manual

POS Printer

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1. Manual Information

This Wi-Fi Operation Manual provides information on POS printer's Wi-Fi settings.

We maintain ongoing efforts to enhance and upgrade the functions and quality of all our products. Product specifications or user manual content may be changed without prior notice.

2. Printer's Wi-Fi Settings

2.1 AP Mode Settings

1) Connect i9 Wi-Fi cards by computer.



2) Open the browser to enter the default IP: 192.168.1.1 into the settings interface, the web interface login password is : 12345678, "SoftAP Configuration" is the information under AP mode. Manually input that and change the password or name.

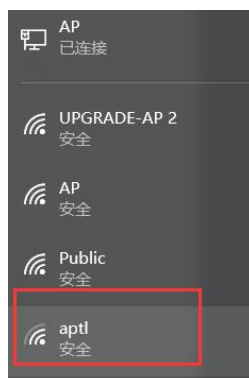
fn-link SoftAP Configuration	
SoftAP SSID:	8711af_ap
Security Type:	WPA2-AES ▼
Password:	12345678
Channel:	6 ▼
AP Static IP:	 ☐ Enable Static IP
Submit	

3) Click "Submit".

fn-link SoftAP Configuration	
SoftAP SSID:	ap1
Security Type:	WPA2-AES ▼
Password:	1234567890 ×
Channel:	6 ▼
AP Static IP:	☐ Enable Static IP
Submit	

4) Click the Refresh or return key to check if the set parameters are saved successfully.

5) If saving successfully, restart the printer, and connect the Wi-Fi again (by new name, new password)



6) As in step 2, go to the webpage settings interface to modify the IP. Enter the IP you want to set (Note: set the IP value and the board with the same network segment 192.168.1.N)

Choice "ENABLE STATIC IP " (Here means tick), click submit, modify is successful.

fn-link SoftAP Configuration	
SoftAP SSID:	ap1
Security Type:	WPA2-AES ▼
Password:	1234567890
Channel:	6 ▼
AP Static IP:	192.168.1.3 × ☒ Enable Static IP
Submit	

2.2 STA Mode Settings

1) Firstly enter the web page settings interface by using the current printer IP , in the third module “Transfer Configuration “ modify Wi-Fi mode, select station, click “Submit”, refresh or go back, and return to the settings interface

fn-link Transfer Configuration	
Moudle MAC:	a0:2c:36:18:f5:94
Moudle Version:	v0.3.8
Wifi Mode:	STATION SOFTAP
Transfer Type:	TopServer
Transfer Port:	9100
UART Baudrate:	1200
Submit	

2) The second module “Station Configuration” is to set the station mode and with related parameters: Enter the router Wi-Fi name by manual, select the encryption mode, enter the router Wi-Fi password.

fn-link Station Configuration	
Station SSID:	UPGRADE-AP
Security Type:	OPEN WPA2-AES WEP
Station Static IP:	☐ Enable Static IP
Submit	

fn-link Station Configuration	
Station SSID:	UPGRADE-AP
Security Type:	WPA2-AES
Station Password:	12345678A
Station Static IP:	☐ Enable Static IP
Submit	

3) Click “Submit”, restart the printer, and print the self-test page to check the settings, and dynamic mode to get the IP address.

The computer connects to the selected router Wi-Fi (UPGRADE-AP).

4) With the step 6(AP mode), enable static IP.

5) Connect the route Wi-Fi, input printer current IP on the page, enter into the parameter settings interface, check “Enable Static IP”, enter the IP you want to set (set same network segment with the router). Click “Submit” to restart the printer.

fn-link Station Configuration	
Station SSID:	UPGRADE-AP
Security Type:	WPA2-AES ▼
Station Password:	12345678A
Station Static IP:	10.0.16.87 ☒ Enable Static IP
Submit	

6) Reset: It can via the reset module at the bottom of the page or by the utility to send command “1d 1d 03”, reset mode (AP mode). (Reset through the web reset module, need to restart the printer twice)

fn-link Login password Configuration	
Old Password:	
New Password:	
Submit	

fn-link Reset/Reboot Configuration	
reset module	reboot module

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Notice: the button behind Wi-Fi module is not the restart button , currently it is the invalid key.

2.3 Wi-Fi Settings through USB

3. Wi-Fi Module OTA Update

3.1 Introduction

The firmware upgrade is through the TCP channel for the upgrade operation, but does not support cloud upgrades (cloud). Only in LAN upgrade.

The module can be upgraded in station mode and SoftAP mode by separately. The module needs to be connected to an external route (this route can not connect to the external network).

SoftAP mode does not require external routing.

After the upgrade is successful, the module will automatically restart the latest firmware.

Note: <CR> <LF> represents the Enter key, and the code implementation can use \r \n or \n.

The command must end with \r \n or \n, and the other, it does not support .

"[]" in the parameter means a variable that does not have to be written to the commands. All input parameters are entered as strings.

3.2 Update Under Station Mode

3.2.1 The Module Configured is Station Mode

Power on the Module and it goes through the transmission mode default, enter "+++" into the AT command mode.

The order of the instructions is as follows:

AT + MODE = 1 <CR> <LF> (1)

AT + STAID = Asun <CR> <LF> (2)

AT + STAPWD = 12345678 <CR> <LF> (3)

AT + CONNECT <CR> <LF> (4)

AT + CONNECT =? <CR> <LF> (5)

The above instructions must be executed successfully (return OK <CR> <LF>) to complete.

Command parsing:

(1) Configure the Wi-Fi module as station mode.

(2) Setting need connect the route SSID .

(3) Setting need connect the route PASSWORD.

(4) To start connecting to the route.

(5) Query whether the connection is successful. If status is YES indicates that the connection is successful and NO is a failure.

After the above steps are successful, the module is correctly connected to the route.

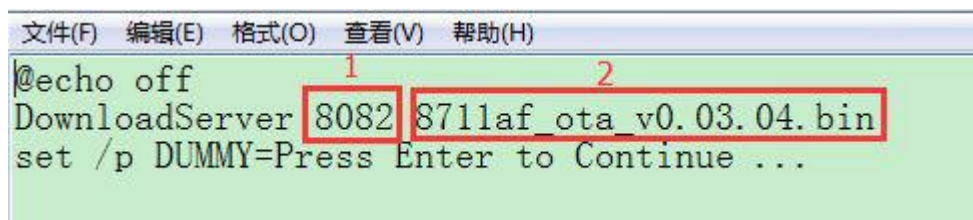
3.2.2 PC Settings

1) In next step, connect the PC to the same route. After connecting to the route, open **OTA_updata_tool_v3.4b**

In the Folder, you will see the following files:

DownloadServer.exe	2015/9/16 17:59	应用程序	86 KB
readme.txt	2015/9/16 17:59	文本文档	1 KB
start.bat	2016/3/7 11:45	Windows 批处理...	1 KB

2) Please copy the firmware bin file that needs to be upgraded to the folder and right click start.bat to edit .

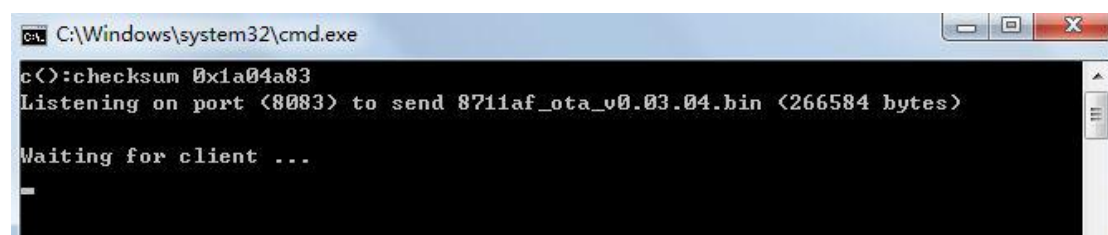


```

文件(F) 编辑(E) 格式(O) 查看(V) 帮助(H)
@echo off
DownloadServer 8082 8711af_ota_v0.03.04.bin
set /p DUMMY=Press Enter to Continue ...
    
```

In the circle/Box 1 it means establishing port of tcp server , no need to change, in the box 2, Change to be the firmware name that need to be upgraded .
Save and exit.

3) Double-click to open the folder under the start.bat file, then appear the following interface :



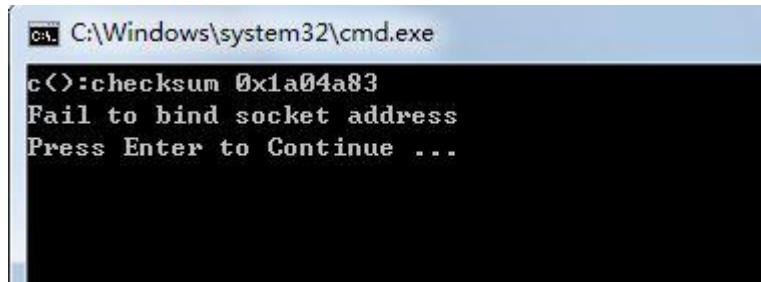
```

C:\Windows\system32\cmd.exe
c(>):checksum 0x1a04a83
Listening on port <8083> to send 8711af_ota_v0.03.04.bin <266584 bytes>
Waiting for client ...
    
```

Indicating that the PC side of the TCP server has been established, port = 8083, remember the port, it will be used in the following.

4) Need to send the bin file with the name **8711af_ota_v0.03.04.bin**. Wait for client to access.

5) If appears the following interface , indicating that other applications on the PC side are occupying the port number, you need to edit **start.bat file**, and change the port in box 1 to something else that is not occupied.



```
C:\Windows\system32\cmd.exe
c(>):checksum 0x1a04a83
Fail to bind socket address
Press Enter to Continue ...
```

6)Next, open the cmd interface, check the IP address of the PC side, enter the **ipconfig** and press enter, it will show the current PC IP address. As shown below pic IP = 172.27.35.1. Remember the address,it will be used in the following .



```
C:\Users\Administrator>ipconfig

Windows IP 配置

以太网适配器 UPN - UPN Client:

    媒体状态 . . . . . : 媒体已断开
    连接特定的 DNS 后缀 . . . . . :

无线网络适配器 无线网络连接 4:

    连接特定的 DNS 后缀 . . . . . :
    本地链接 IPv6 地址 . . . . . : fe80::ddb4:c064:6286:79cc%15
    IPv4 地址 . . . . . : 172.27.35.1
    子网掩码 . . . . . : 255.255.0.0
    默认网关 . . . . . :
```

3.2.3 Module End to Upgrade

The order/queue of the command is as follows:

AT + UPDATA = 172.27.35.1,8083 <CR> <LF> (1)

The above instructions must be executed successfully (return OK <CR> <LF>) to complete.

Command parsing:

(1) Start to create a **tcp client** to upgrade firmware, **172.27.35.1** is the IP that accessed in 2.2 chapters.

8083 is the value of the user's final change in the **start.bat file** in section 2.2.

Return **OK <CR> <LF>** Indicates that the firmware upgrade is finished and the new firmware is automatically run.

3.2.4 SoftAP Module to Upgrade

SoftAP module setting is :

The order/queue of the command is as following:

```
AT+MODE=2<CR><LF> .....(1)
AT+APSSID=8711AF_AP<CR><LF> .....(2)
AT+APPWD=12345678<CR><LF> .....(3)
AT+APCHANNEL=6<CR><LF> .....(4)
AT+APSTART<CR><LF> .....(5)
AT+APSTART=?<CR><LF> .....(6)
```

The above instructions must be executed successfully (return OK <CR> <LF>) to complete.

Command parsing:

- (1) Configure the Wi-Fi module as SoftAP mode.
 - (2) Set the SSID name of the AP that the module is launching.
 - (3) Set the PASSWORD of the AP that the module is launching.
 - (4) set the CHANNEL of the AP that is module is launching.
 - (5) began to activate the routing mode, launch the AP.
 - (6) Checking whether the query is activated successfully. Status is YSE means the connection is successful and NO is failed.
- After the above steps are successful, it means the module launches or emits the AP correctly.
- The device that need to communicate with the module must be connected to AP of the module launched, then can go on the data transmission.
-

PC side settings

Next, connect the PC's wireless with the AP of module launched. After the connection is successful, you can proceed to the next steps.

After the above steps are done, the following steps are operate in the **OTA_updata_tool_v3.4b** folder and same with the 2.2 chapter .please refer to section 2.2.

module start to upgrade

The steps are the same as in Section 2.3. Pls have a reference to section 2.2 .

4. Restore Factory Settings

1) On the state of shutdown, press RESET button waiting for 5 seconds or so , and turn on the printer, until hearing the sound of printer's paper-out, then the printer recovers its factory status. then you can go back to first step

Wi-Fi Reset Key

