

CP55

Utilities Manual



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1. Card Printer Config

CP55 is produced with optimized setting. You need to adjust setting value if required or spare parts are replaced using CardPrinterConfig in our Installation CD.

You can adjust following settings with CardPrinterConfig.

(1) Run CardPrinterConfig

Password input window is displayed when you run this program. If you input the correct password, the recorded setup value will be shown and you can change values. The password is saved to CP55 printer. So if you use another PC with same printer, previous password is required to run this program. (Default password is none. Please press OK if you have not set password.)

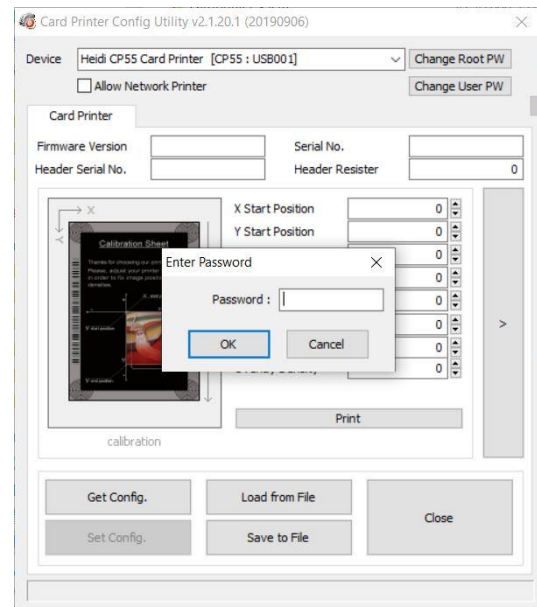


Figure 1 CardPrinterConfig Log-in

When you are successful to log-in, you can set values shown as left picture.

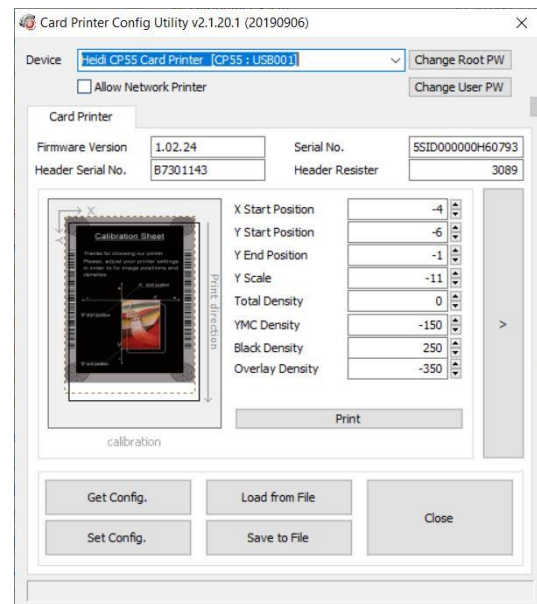


Figure 2 CardPrinterConfig start

(2) Card Printer Basic Setup

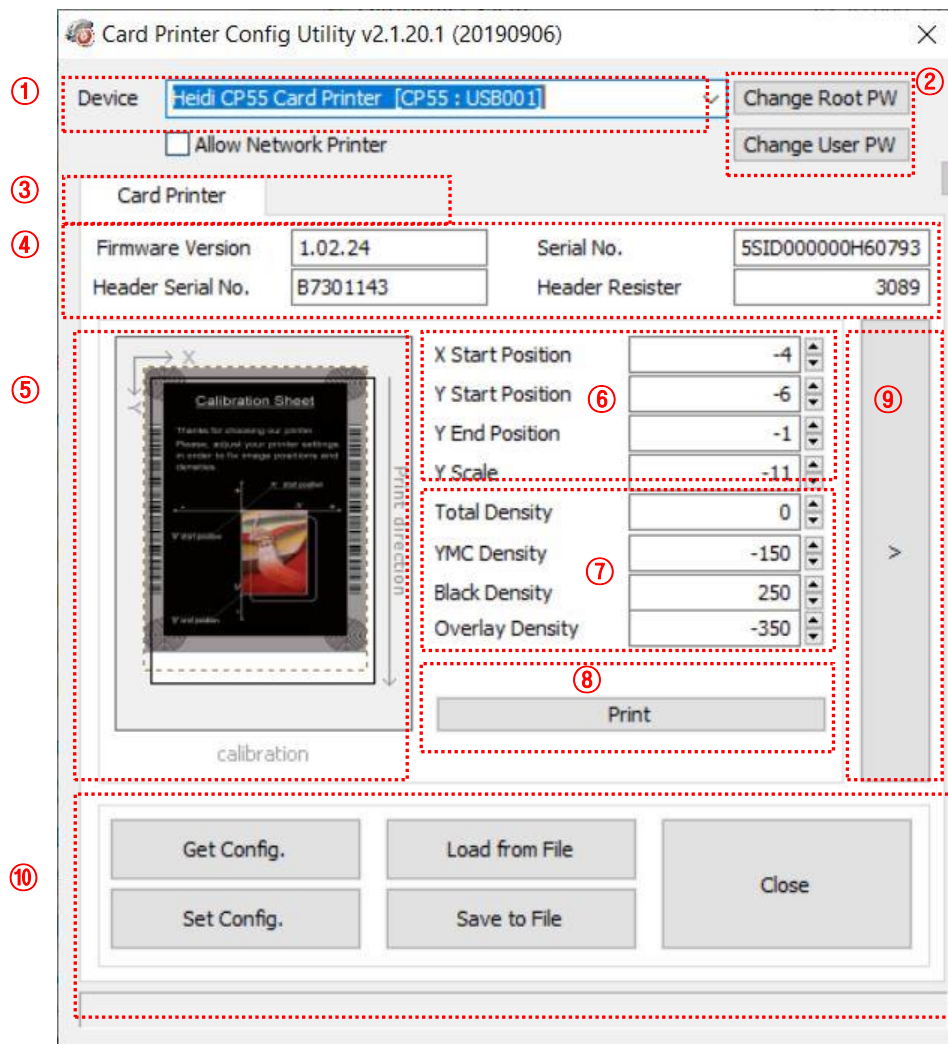


Figure 3 CardPrinterConfig – Card Printer Basic Setup

- ① To show connected printers

Device: You can select a printer using pull-down menu. “HEIDI CP55 Card Printer” is a name of printer. “CP55” is printer ID, “USB005” is connected port. If you connect the Network printer, please check the “Allow Network Printer” and select in the pull-down menu.

- ② To set administrator password and user password.

Change Root PW: To set administrator (root) password. This password is used to verify user authority for CardPrinterConfig and User Authentication. Also it is required for User password management. (Please set password for security use.)

Change User PW: To set user password for User Authentication.

- ③ Click “Card Printer” tab.(If flipper is installed, you can setup flipper setting value by “Flipper” tab..
- ④ To show firmware version, serial number of printer and serial number, resister & type of print head.
- ⑤ To show print area. It shows exaggeratingly for user convenience.
- ⑥ To set print area. Please set it properly to print on an entire card because CP55 is a direct thermal card printer. When you click “⑦ Print”, a card is printed as like “④ example”. Please set values properly that all circles of each corner are printed and blank spaces are 0.4mm ~ 0.5mm in the top and the bottom of a card. Please set values by following order.

X Start Position: Please set right and left properly by adjusting X position.

Y Start Position: Please set the start position of printed example image and blank space in the top is 0.4mm ~ 0.5mm.

Y End Position: Please set the end position of printed example image and blank space in the bottom is 0.4mm ~ 0.5mm. It is recommended to set bigger value for “Y scale” than default.

Y Scale: Please set to show circles in the bottom.

- ⑦ To set density. CP55 enables to set different density for each color, resin black and overlay. So, please set each density for high quality. Please optimize the quality by adjusting each value. To optimize, you repeatedly adjust the density and print a Calibration card and check the print state until you get the optimum.

Total Density: To set all of the density (Color, Black and Overlay) at one time.

YMC Density: To set color density. Please maximize YMC density as you can, which enables to express range of color and vivid images. If it is too strong, green or red marks are appeared. If it is too weak, the print quality will be dull.

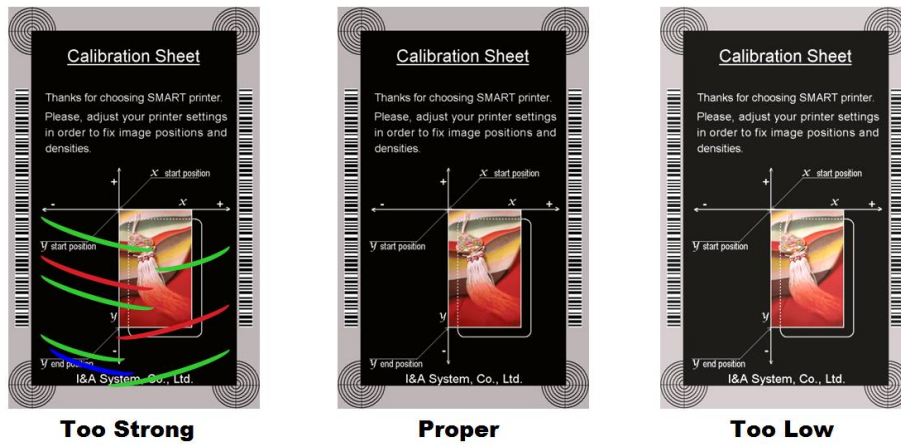


Figure 4 Color density

Black Density: To set resin black density. In the picture, barcode is printed to express density.

When density is too strong, barcode is printed too thick. When density is too weak, barcode is too thin. Please adjust resin black density to express clear barcode. Please refer to the following pictures.

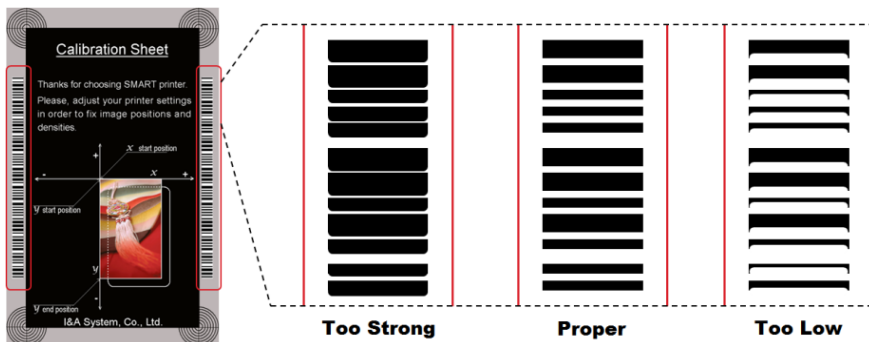


Figure 5 Resin Black density

Overlay Density: To set overlay density. Please set it when overlay is printed on surface regularly. If it is too strong, it is hazy and marks are appeared. If it is too weak, overlay panel is not printed edge areas. You can check it with printed card under the light.

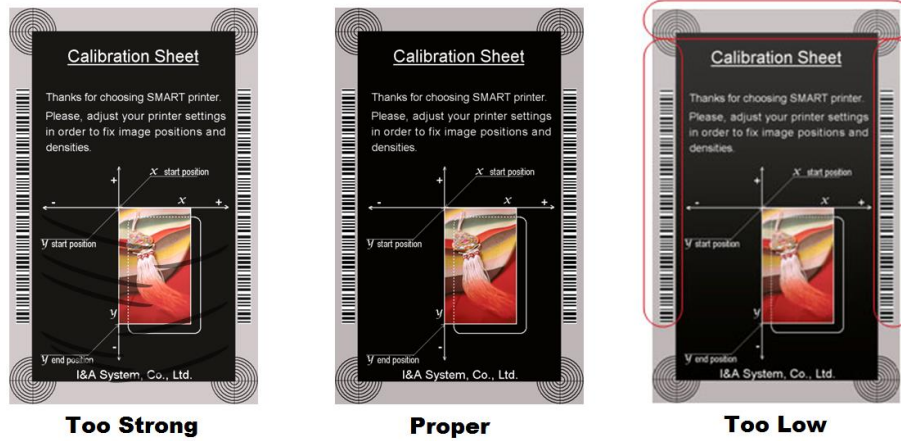


Figure 6 Overlay density

⑧ To print calibration card.

⑨ To show advanced Setup.

(It is recommended not to set advanced setup.)

⑩ To load or save values.

Get Config.: to get values from current printer

Set Config. : to set values to current printer

Load from File: to load values from file

Save to File : to save values to file

Load Default : to load default. Please adjust values again after load default.

Close : to close CardPrinterConfig

(3) Card Printer Advanced Setup

You can set more values.

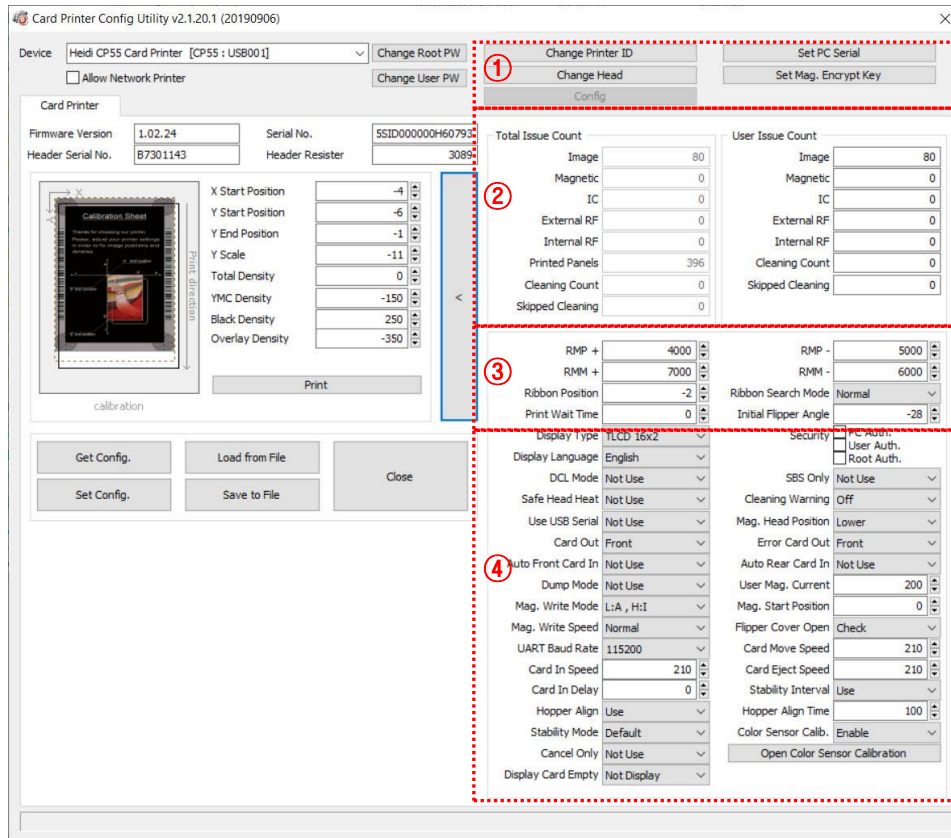


Figure 7 CardPrinterConfig – Card Printer Advanced Setup

- ① You can set Printer ID, PC serial, Print head and Magnetic encryption key.

Change Printer ID: When CP55 is used by SDK, you can set unique ID for CP55 printer regardless of whether it is connected by USB or what IP address is. It is useful to connect and use several printers. Default is “CP55”.

Set PC Serial: One of security function. You can use a printer with specific PC.

It is activated when you click “Set PC Serial” after “**PC Auth.**” of ④ is checked and rebooted. At that time, the specific information of used PC is saved to CP55 printer.

Change Head: When you replace thermal print head, you must change head information for optimal quality. Please change head serial number, resistor and type of head in the Change Head Dialog window after click “Change Head”.

Set Mag. Encrypt Key: One of security function. When you use SDK, you can encrypt magnetic stripe encoding data transmitted by USB. You can define and save the encryption key to CP55 using “Set Mag. Encrypt Key”.

- ② To show how many cards are issued with CP55 printer. “Total Issue Count” is the number of issued cards from factory shipment, “User Issue Count” is the number of issued cards from replacing head. When you replace a head, please initialize the number by ticking “Reset User Issue Count”.
- ③ To show ribbon motor management. CP55 recognizes ribbon color automatically and controls motor by ribbon remaining. “RMP+”, “RMP-“, “RMM+”, “RMM-“ are necessary variables to control ribbon motor. Please do not change values for them as it affects card quality.

RMP+: Set the ribbon motor’s max torque value while printing when the balance is max.

RMP- : Set the ribbon motor’s min torque value while printing when the balance is min.

RMM+: Set the ribbon motor’s max torque value while moving when the balance is max.

RMM- : Set the ribbon motor’s min torque value while moving when the balance is min.

Ribbon Position: Set the ribbon arrangement position

Ribbon Search Mode: Set the ribbon Search method

Print Wait Time: Set the time from lifting down the print head to starting print

Initial Flipper Angle: Set the angle of flipper when card is out if the ‘Card Out’ is ‘Back’

- ④ Please refer as below for other values.

Display Type: Set a type of LCD display module

UART Baud Rate: Set the speed of communication of Internal Serial port. It is used for the KIOSK model.

Security: There are several ways to set a security function for CP55.

PC Auth.: You can use a printer with specific PC. It is activated when you click “Set PC Serial”.

User/Root Auth.: You can set passwords for User and Administrator.

DCL Mode: When you use SDK and print cards with DCL mode, you don’t need to install printer device driver.

SBS Only: Please enable it when you issue cards with software programed by SDK. This option disables printer device driver.

Safe Head Heat: Set not to print if the print head is overheated.

Cleaning Warning: Set to show the 'Do cleaning' message periodically

Use USB Serial: When CP55 is connected to USB, it transmits the USB serial number to PC. Default is the same number used by all CP55. Please set this option when you use multiple CP55 printers connected to 1 PC via USB. It enables unique serial numbers for each USB.

Mag. Head Position: CP55 can install the magnetic encoder on lower side of a card.

Card Out: Set the way to eject cards.

Error Card Out: Set the way to eject error cards.

Auto Front Card In: Set to input a card automatically if the front card-in sensor detects a card. It is used for the KIOSK model.

Auto Rear Card In: Set to input a card automatically if the rear card-in sensor detects a card. It is used for the KIOSK model.

Dump Mode: It records log data to inspect the operation of printer.

User Mag. Current: The default current value when the user selects to use the defined value when magnetic encoding

Mag. Write Mode: You can order the way how to encode magnetic stripe.

"L:A, H:I": encodes 3 tracks at once for LoCo card and encodes at twice by dividing 1,3 and 2 track for HiCo card.

Magnetic Start Position: Set the start position of magnetic stripe when you encode.

Card In Speed: set the speed of inputting a card

Card Move Speed: set the speed of moving a card

Card Eject Speed: set the speed of ejecting a card

Card In Delay: set the delay time to operate the hopper motor.

Stability Interval: select stability or faster speed. Default is 'on', stability.

Hopper Align: Set to USE when using Single Feeder Option.

Hopper Align Time: Set the time to rearrange the card. It is set in 1MS units.

Stability Mode: Set the control method for printer operation stability. When set to "Safe", it slows down the speed however increases stability over "default".

Color Sensor Calib: Set whether to use color panel recognition as the calibration value of the sensor. .

"Disable" is set to the default value.

"Enable" is set to the Open Color Sensor Calibration value.

Open Color Sensor Calibration: Measure the value of the color sensor.

Cancel Only: Set to “USE”, only “Cancel” is displayed on the LCD display when and error occurs.

Display CardEmpty: Set to “Display”, LCD shows Card Empty when no card on the input hopper.

Front Device: This function is not used in this model.

(4) Flipper Setup

This 'Flipper' tab is shown when the flipper option is installed.

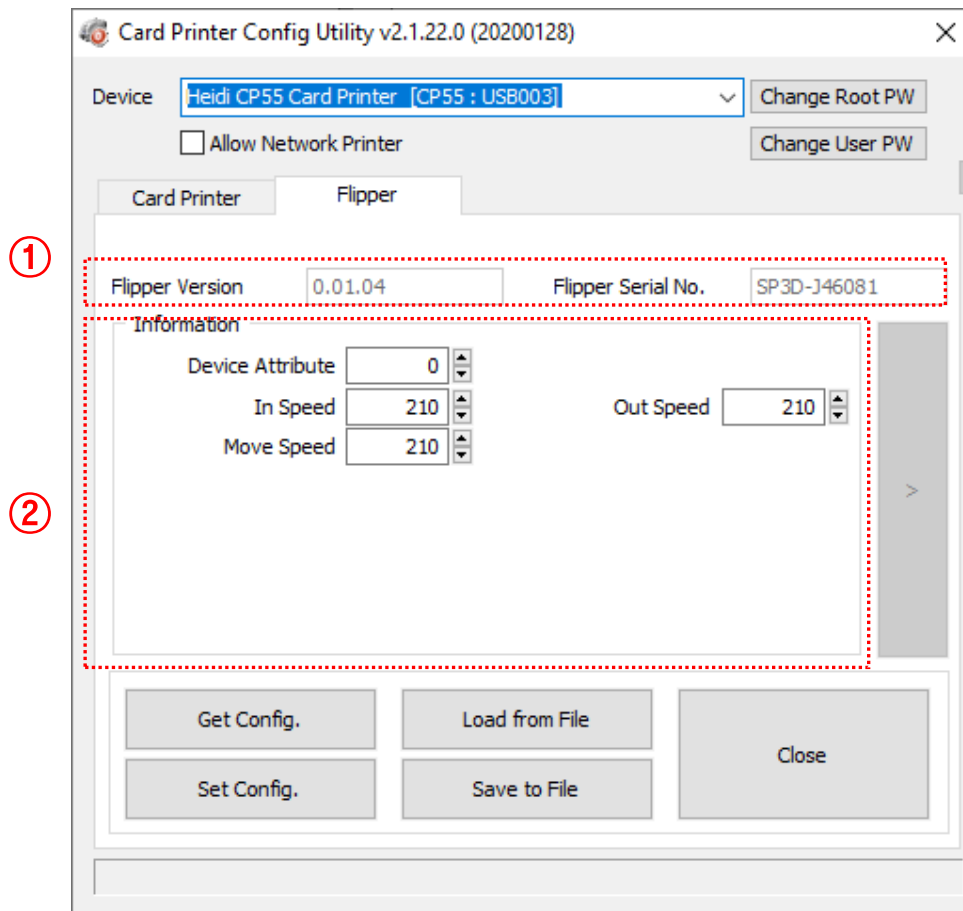


Figure 8 CardPrinterConfig – Flipper Setup

① To show installed flipper

Firmware version and serial number of flipper

② To set configuration of flipper

Device Attribute: Basic attribute of flipper

Card In Speed: Set the speed of inputting a card into a flipper

Cade Move Speed: Set the speed of moving a card in the flipper

Card Eject Speed: Set the speed of ejecting a card from the flipper

2. Network configuration

(1) Connecting network port

The printer which installed with network option has a port for network connection as shown in the left picture.

- ① Network Port
- ② USB port
- ③ Power Supply Connector
- ④ Power Switch



Figure 9 Rear view of CP55 printer 1

Please connect network cable (RJ45) to a printer.

(Network cable is not supplied. Please ask network administrator for more questions.)



Figure 10 Rear view of CP55 printer 2

Please run NetAdmin.exe in the CP55 installation CD to set or change network configuration.

Please run NetAdmin.exe in the CP55 installation CD to set or change network configuration.

(2) Network configuration

NetAdmin is run as the Figure 11 after turning on CP55 network printer.

- ① Printer Connection Status
Searches local network, finds and shows available network printer.
- ② Network Module Management
Searches connected encoder on network module. Reboots, Resets network module. Firmware upgrade available
- ③ Printer Configuration
Sets detailed system configuration.
- ④ Network Information
Shows firmware version of network module

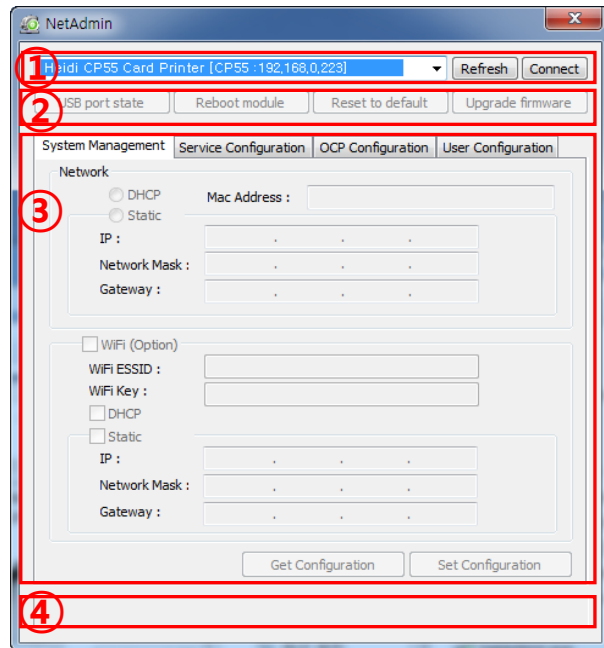


Figure 11 Running the NetAdmin

When no printer is connected to network, there is no printer shown on the box.

Please click “Refresh”.

If no printer shown, please check as below,

1. Please check the printer is turned on.
2. Please check network cable is connected to network hub and works properly (LED lamp blinking).
3. Please check if there is DHCP server in the local network. When DHCP server is not in your local network, you need to set Static IP.
4. If Static IP is used, please check the

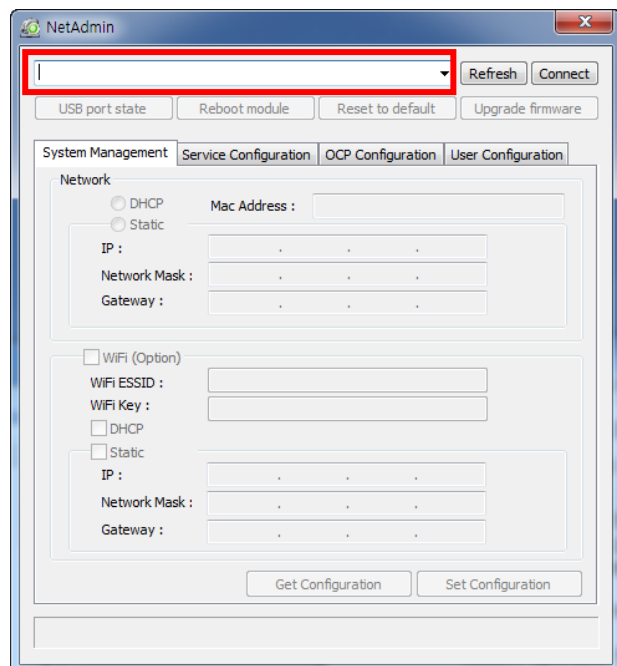


Figure 12 Network printer is not found

IP configuration. If another device uses same IP address, it doesn't work.

If you are unable to find printer in local network, please connect printer by USB. You can setup network by USB.

When you click Refresh, you can find a printer connected by USB as shown in the left picture.

- You don't need to install device driver for network configuration by USB. Please ignore messages related to device installation.
- You can change values of "System Management" only when you connect a printer by USB. Please connect a printer by network to use all of the functions of Netadmin.exe.

Please select a proper printer and click "connect". Please enter password and click "OK".

Default password is "admin".

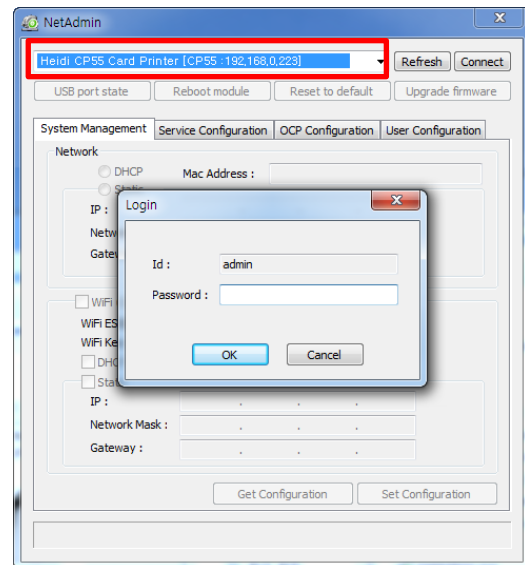


Figure 13 Connecting to USB port

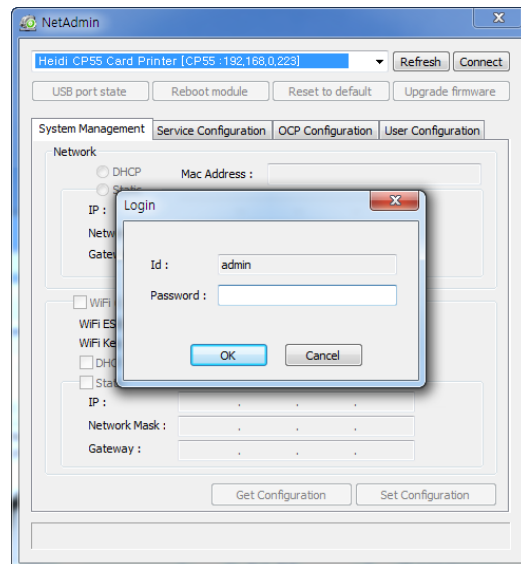


Figure 14 NetAdmin Log-in

“USB port state” shows USB device status connected on network module.

- Network module has 4 USB ports.
- Network module supports PC/SC. When you install the encoders that support PC/SC on network module, you can recognize the status of encoders.

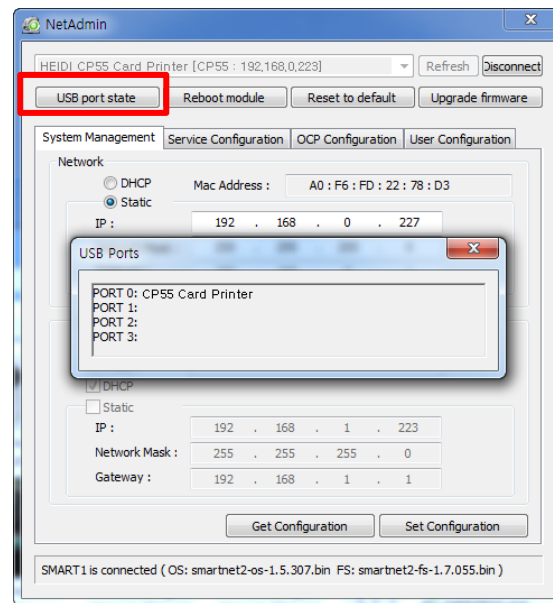


Figure 15 USB port state

“Reboot module” reboots network module.

- Please click “Yes” when pop-up window comes out for reboot.
- It takes 1 minute to reboot.
- Please click “Refresh” after reboot. When proper printer shown, please connect printer by clicking “Connect”.

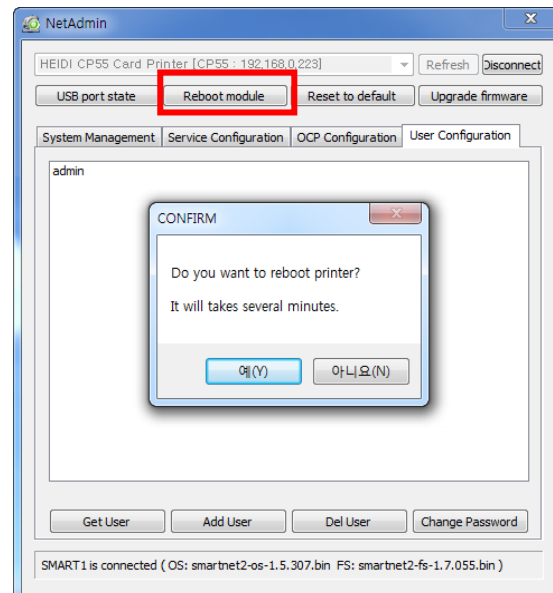


Figure 16 Rebooting the network module

“Reset to default” resets to default and reboot network module.

- Please click “Yes” when pop-up window comes out for reset.
- It takes 1 minute to reboot.
- Please click “Refresh” after reboot. When proper printer shown, please connect printer by clicking “Connect”.

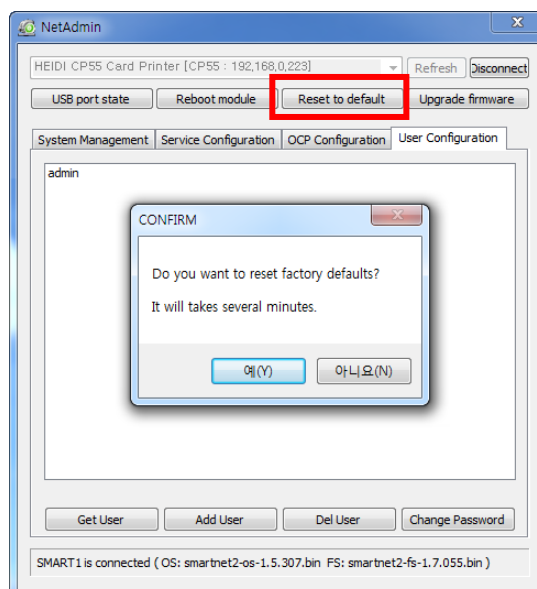


Figure 17 Reset to default

“Upgrade firmware” enables to upgrade firmware of network module.

- You can choose a firmware file.

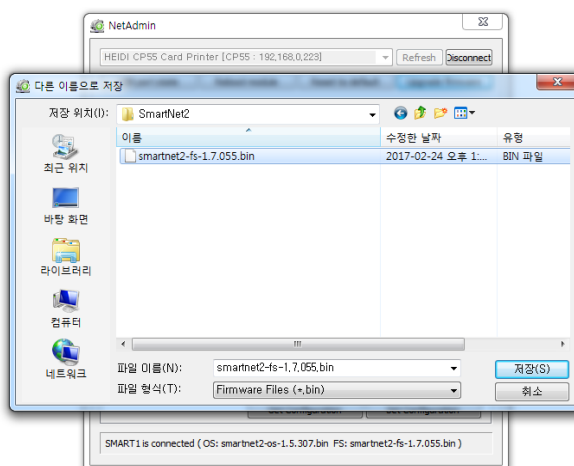


Figure 18 Upgrading the firmware 1

- Warning box will be shown during firmware upgrade for network module.
- It is recommended not to do other work during firmware upgrade for system reliability.
- Please do not turn off a printer until the upgrade is completed.

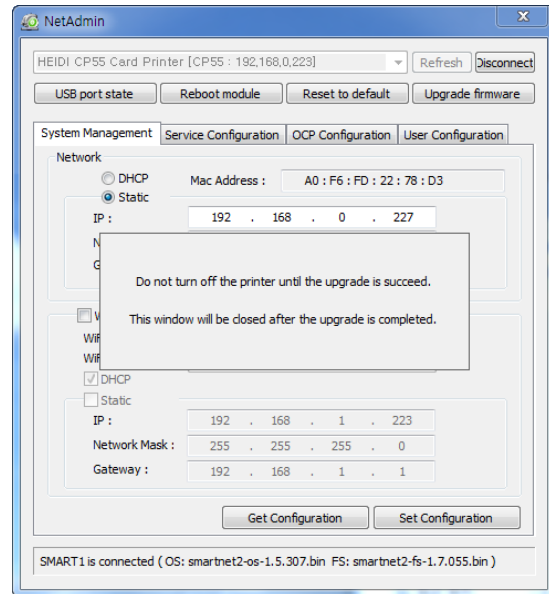


Figure 19 Upgrading the firmware 2

- When firmware upgrade is completed, pop-up comes out for reboot. Please click "Yes".
- It takes 1 minute to reboot.
- Please click "Refresh" after reboot. When proper printer shown, please connect printer by clicking "Connect".

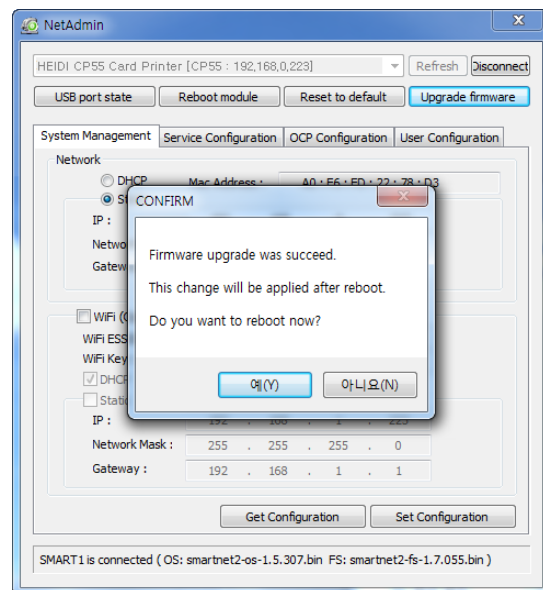


Figure 20 Upgrading the firmware 3

If you setup network automatically, please choose DHCP.

- Please select DHCP or Static.
- **“DHCP”** is default for CP55 printer.
- Please enter values for “IP”, “Network Mask”, and “Gateway”. Click “Set Configuration”.
- Static IP is recommended. DHCP server assigns IP address automatically but this IP address is temporary, so the IP address may be changed. In this case, the network error may occur in connecting to CP55 network printer.
- If you are not aware of static IP, please ask network administrator for Static IP.
- **We recommend using Static IP because it is more stable for using CP55 network printer.**

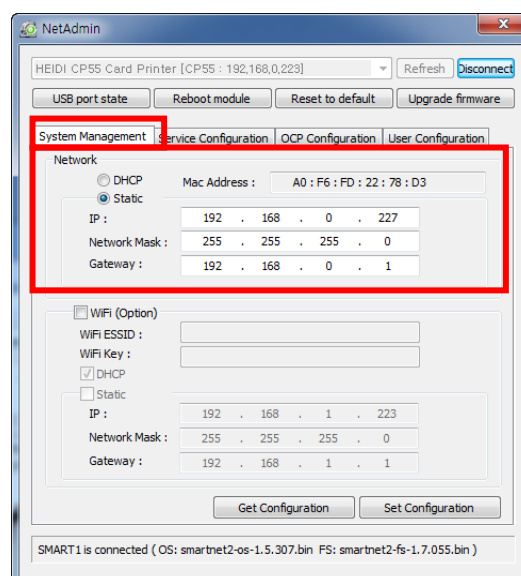


Figure 21 Dynamic IP configuration

Wireless Network Configuration

- For wireless network, the WIFI option should be installed in the Network Module
- Check “WiFi (Option)” button to activate it
- Enter the ESSID value in “WiFi ESSID” to access
- Enter the Key value in “WiFi Key”
- Set the IP address as the same way of LAN network
- Click “Set Configuration” to save the configuration value and reboot the printer

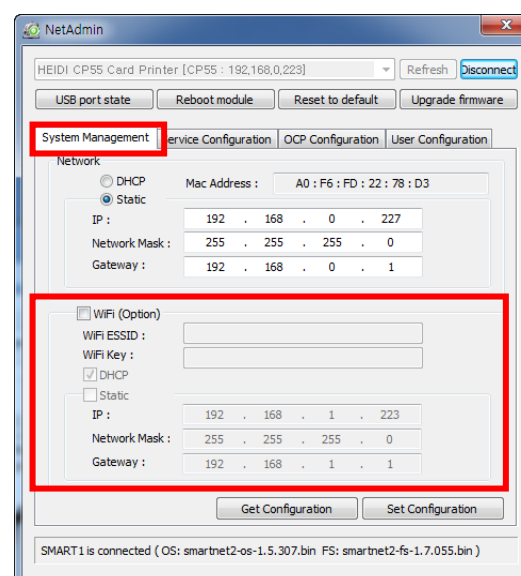


Figure 22 Static IP configuration

You can change Service Configuration.

- CP55 network printer provides 3 kinds of service (change “USB Spool”, “Network Spool” and “Network SDK”). You can select and change the service according to the need.
- In “Network SDK”, you can control the printer and print a card well, and the printer supports SSL (Secure Sockets Layer) and User Authentication for security.
- Please use default and ask technician for details.

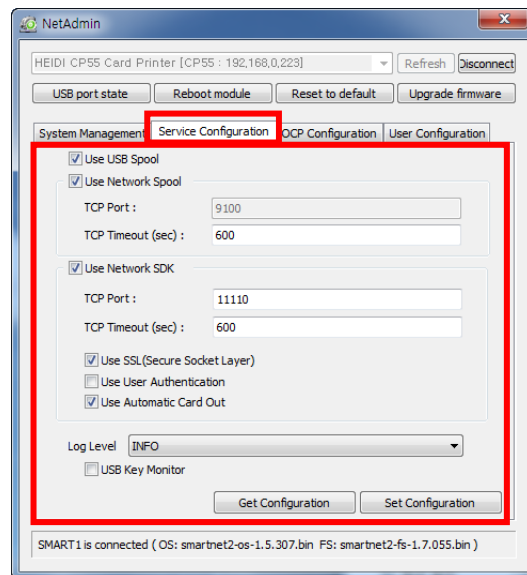


Figure 23 Network service configuration

You can use Open Card Print function.

- This function is for send commands and print through network card regardless of OS
- Click check box “Use OCP”
- “Use Terminal Emulation” is value for getting echo according to the commands through terminal. For security, it supports SSL and User Authentication.
- Please do not change default value except special case.

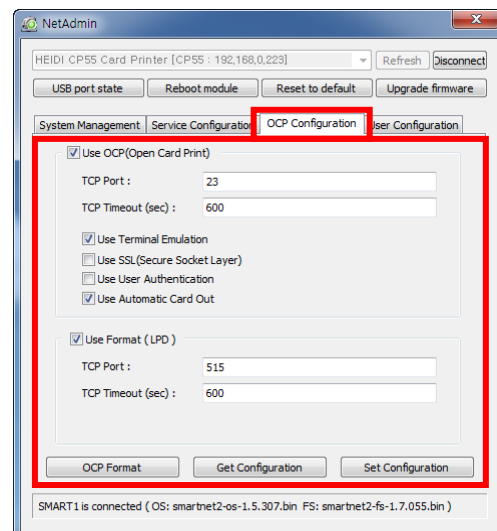


Figure 24 OCP configuration

You can add, change, delete User and change its password.

- “admin” is administrator and you can’t delete this account. Please don’t forget password for “admin”
- “Get User”: shows available users
- “Add User”: makes new user
- “Del User”: deletes selected user
- “Change Password”: changes password

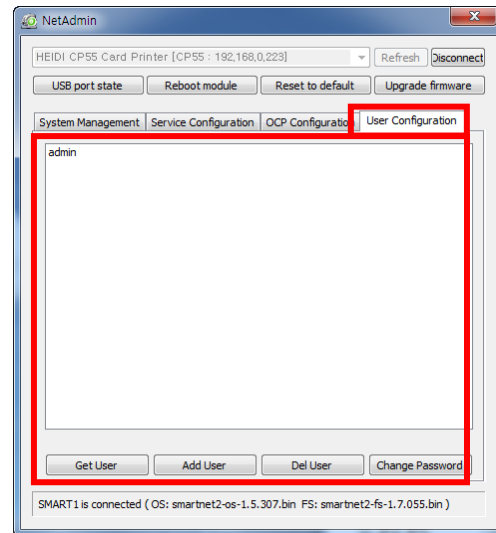


Figure 25 Network user configuration

3. Firmware update

When you run the CardPrinterFirmware, you can see the pop-up window.

(1) CardPrinterFirmware Menu

Device: Select the local printer that you want to upgrade.

Card Printer / Flipper: Select the device you want upgrade.

Device Version: Displays the current firmware version of selected printer.

Binary File: Click “Browse” button and select new firmware file to update.

Manual Update: It is used when you want to update manually.

Update: Updates automatically. In generally, we recommend updating automatically.

Close: Exit.

Message: It displays information of updating.

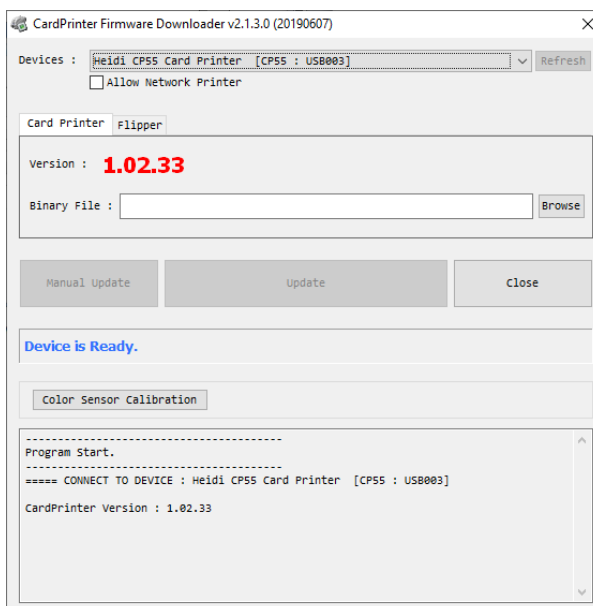


Figure 26 run CardPrinterFirmware

(2) Ready for Firmware Update

- Select the printer to update the firmware on the 'Device' list.
- Select the device to update the firmware among Printer/Flipper tab. The Flipper tab is shown if that option is installed only.
- Click "Browse" and select the new firmware

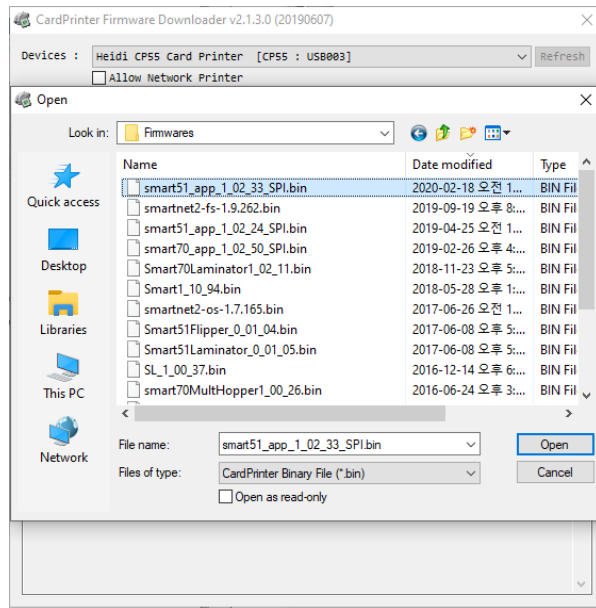


Figure 27 Select Firmware

(3) Firmware Update

- Click "Update" button to upgrade automatically, then the printer is upgraded after rebooting.
- In case there are some problems in the automatic upgrade, you click "Manual Update" and can see the pop-up window as below picture. It shows procedure of manual upgrade. You can upgrade manually according to this procedure.

(Caution: Please do not close upgrade dialog box until it is completed successfully and do not turn off the printer.)

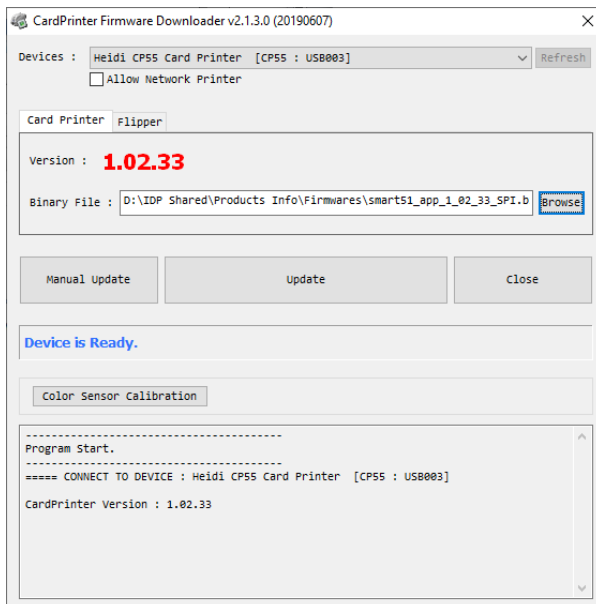


Figure 28 Update Firmware