

CITIZEN

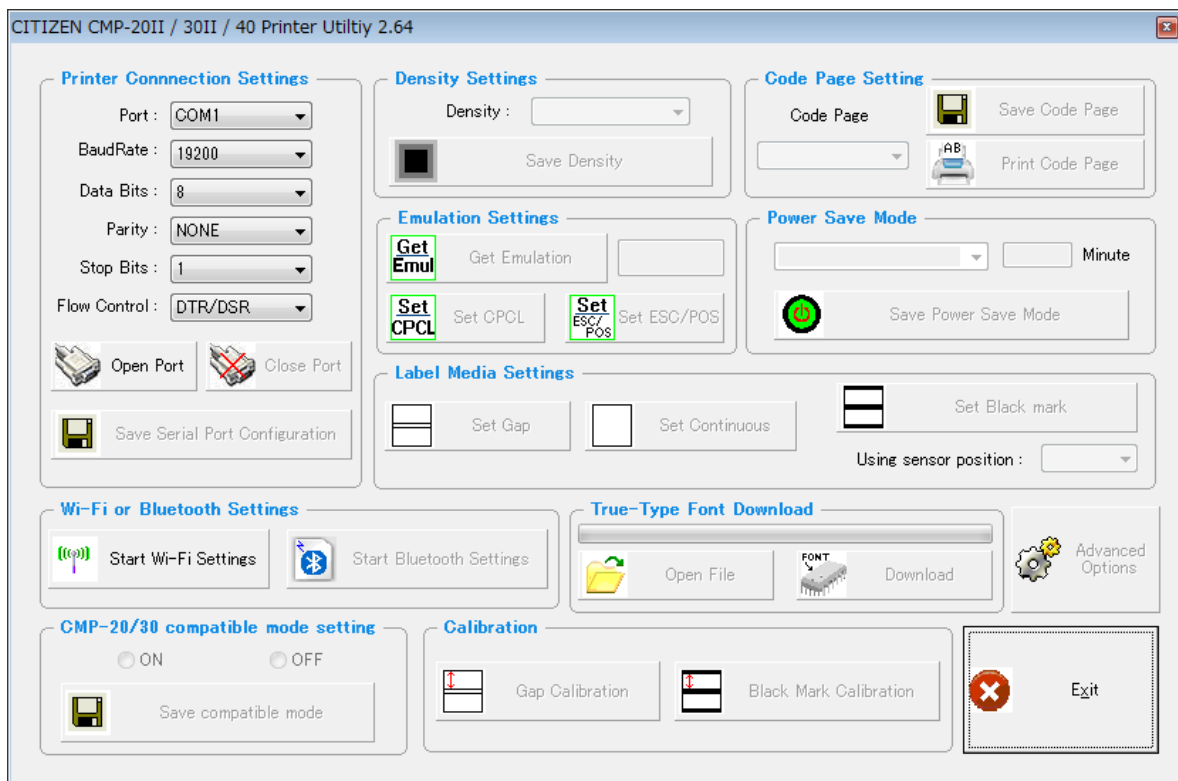
Mobile Printer CMP-20II/30II/40

Utility Manual

V2.64

CITIZEN SYSTEMS JAPAN CO., LTD.

1. Startup screen



On this screen, you can set following items. (Note: Related emulation with the function)

- Printer Connection Settings (Common)
- Density Settings: Default density (ESC/POS)
- Code Page Settings: Default code page (ESC/POS)
- Emulation Settings (Common)
- Power Save Mode (Common)
- Label Media Settings / Sensor to detect label (CPCL)
- Wi-Fi or Bluetooth Settings (Common)
- True-Type Font Download (CPCL)
- Advanced Options (CPCL)
- CMP-20/30 compatible mode settings (Common)
- Calibration (CPCL)

Additional screens show up for the settings of Advanced Options (CPCL), Wi-Fi settings and Bluetooth settings.

Caution: When the application connects to the printer, emulation setting is checked. The settings items are not for the emulation, you cannot change it.

2. Settings other than Wi-Fi or Bluetooth

2-1. Printer Connection Settings

The image displays two identical 'Printer Connection Settings' dialog boxes side-by-side. The left dialog box has 'COM1' selected in the 'Port' dropdown, while the right dialog box has 'USB' selected. Both dialog boxes show the following settings: BaudRate: 19200, Data Bits: 8, Parity: NONE, Stop Bits: 1, and Flow Control: DTR/DSR. At the bottom of each dialog, there are three buttons: 'Open Port' (with a printer icon), 'Close Port' (with a printer icon and a red X), and 'Save Serial Port Configuration' (with a floppy disk icon).

You can connect the printer to PC by Serial (COM1 – COM9) or USB port.

When you use Serial Port, you have to check the Baud Rate setting between the printer & PC.

Once the printer is connected with PC via serial interface, you can change the Baud Rate setting of the printer and you can save the changed Baud Rate to the printer by 'Save Serial Port Configuration'.

You can disconnect printer from the PC by clicking 'Close Port'.

2-2 Density (ESC/POS)

The image shows the 'Density Settings' dialog box. It contains a 'Density' dropdown menu currently set to 'DENSITY [+1]'. Below this menu is a button labeled 'Save Density' with a printer icon to its left.

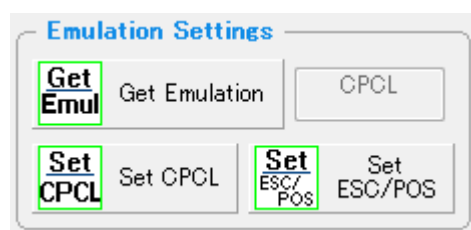
Print density can be set in five grades between -1 to +3.

2-3 Code Page (ESC/POS)

The image shows the 'Code Page Setting' dialog box. It features a 'Code Page' dropdown menu set to 'CP_437'. To the right of the dropdown are two buttons: 'Save Code Page' (with a floppy disk icon) and 'Print Code Page' (with a printer icon).

You can choose codepage and print the codepage data here.

2-4. Emulation settings

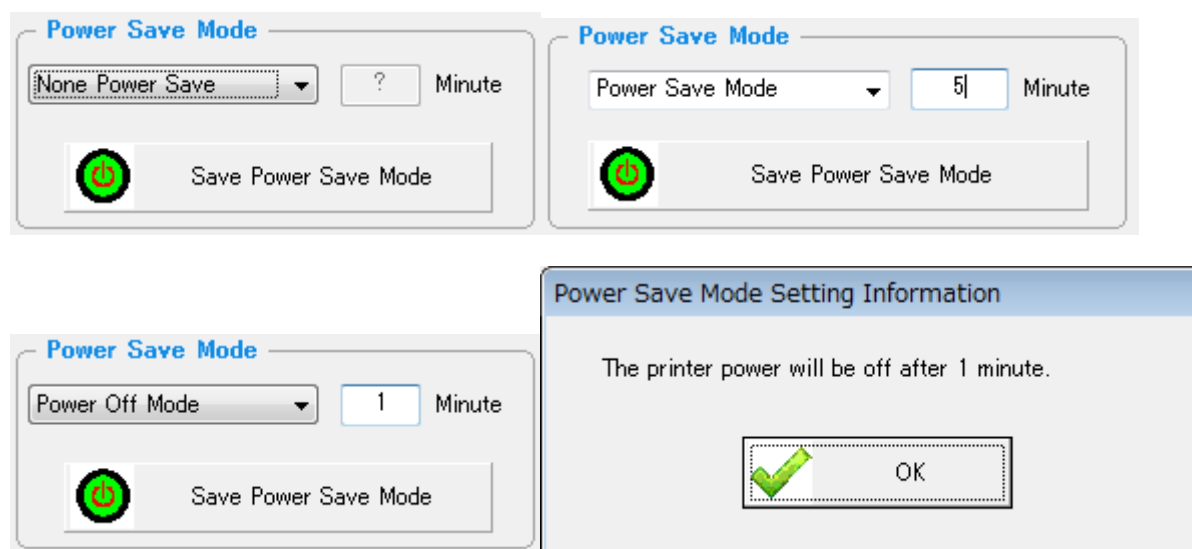


“Get Emulation” shows current emulation.

Press “Set CPCL” or “Set ESC/POS” to change the emulation. It turned the printer off automatically.

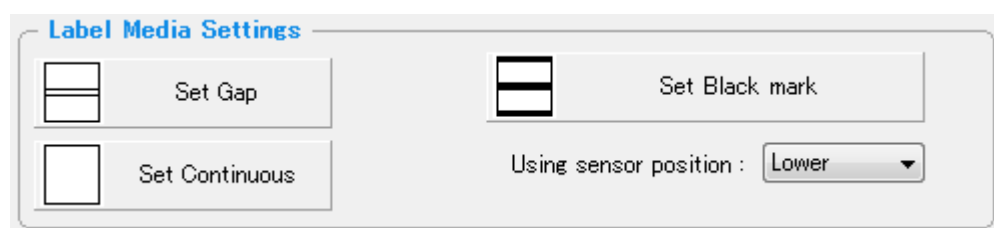
2-5. Power Save/Power Off Mode

You can set the power save mode like “No Power Save”, “Power Save Mode” & “Power Off Mode” and you can set the waiting time to Power Save Mode.



Mode	Description
No Power Save	Do not use Power Save Mode
Power Off Mode	After the fixed time passes without working, the printer power becomes off automatically.
Power Save Mode	After the fixed time passes without working, the printer goes into Power Save Mode automatically. To go back to normal mode, printer needs to receive few bytes dummy data. We recommend using NULL for dummy data.

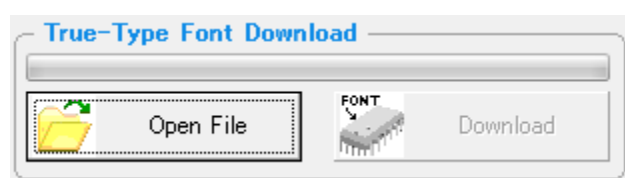
2-6 Label Media Settings (CPCL)



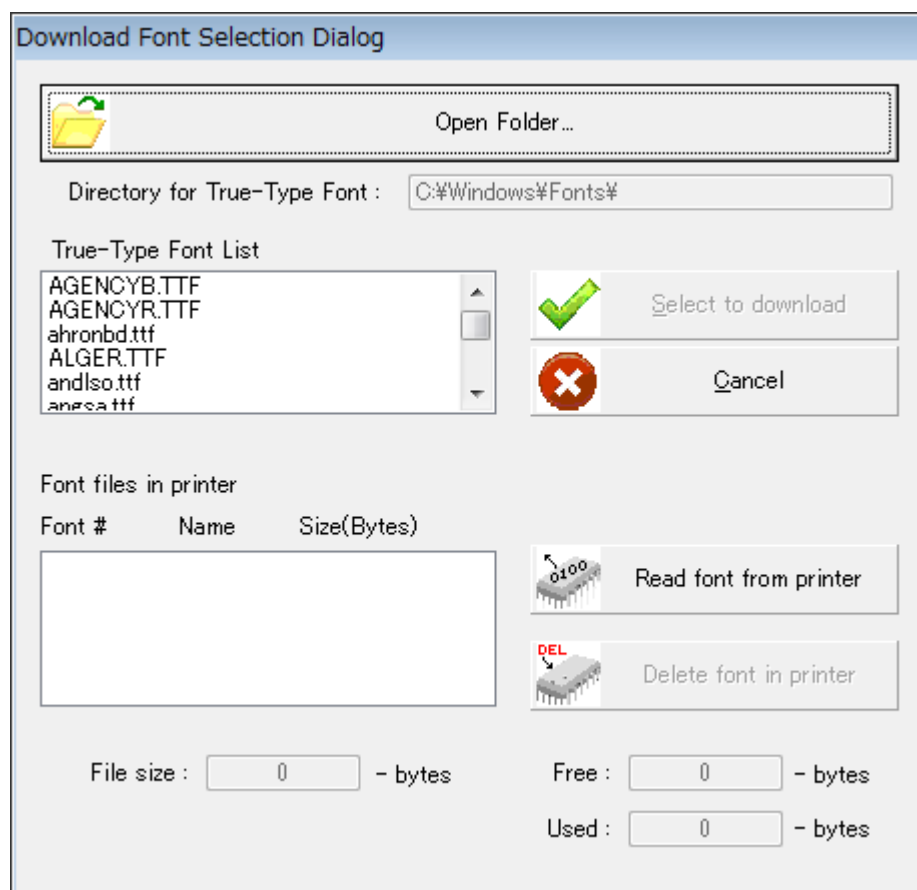
Media can be set here for CPCL. You can choose Label paper (Set Gap), Black mark paper (Set Black mark) or Receipt paper (Set Continuous).

If you choose Black mark, sensor position needs to be set as well. If black mark is on backside of paper, choose "Upper". If black mark is on recording side of paper, choose "Lower".

2-7 True-Type Font Download (CPCL)



You can see the dialogue below by pressing "Open File". Choose the TrueType font to download. You can check and delete the already downloaded TrueType font on the printer too. After choosing TrueType font, press Download button on the original screen. Then chosen TrueType font data is downloaded to the printer.



2-8 Advanced Options (CPCL)



By pressing this button, the dialogue below shows up.

Advanced Options

Options

Get Information

Save Information

Language option

Language setting :

Margin options

Left margin : Range : [0 ~ 254] as

Positive = [0 ~ 127]

Negative = [128(-1) ~

Top margin : Range : [0 ~ 80]

TOF margin : Range : [0 ~ 254] as

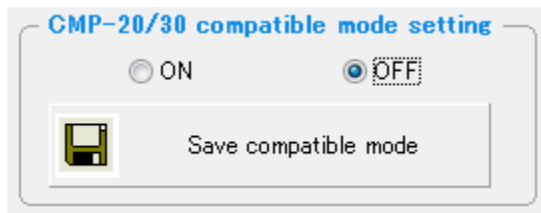
Positive = [0 ~ 127]

Negative = [128(-1) ~

Options exit

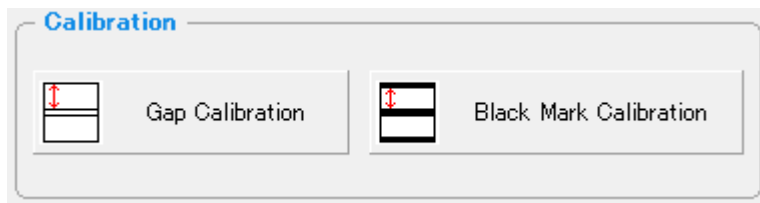
On this dialogue, you can check and set the Language setting, Left margin, Top margin and margin from TOF to print area.

2-9 CMP-20/30 compatible mode setting (ESC/POS)



This function make the ID of CMP-20II/30II same as CMP-20/30 type I. If the applicatio for type1 does not work for typell, try this function. (This does not guarantee to solve the issue.)

2-10 Calibration (CPCL)

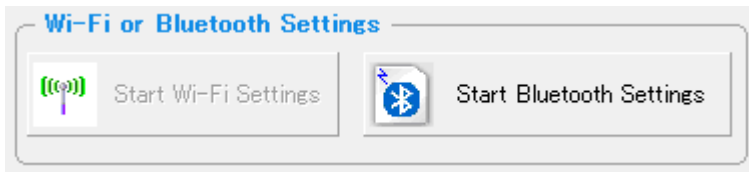


If label gap or black mark cannot be recognized well and printing from top of form does not work well, try to adjust the sensor level by this function. Please refer to the User's manual for the condition to use this function.

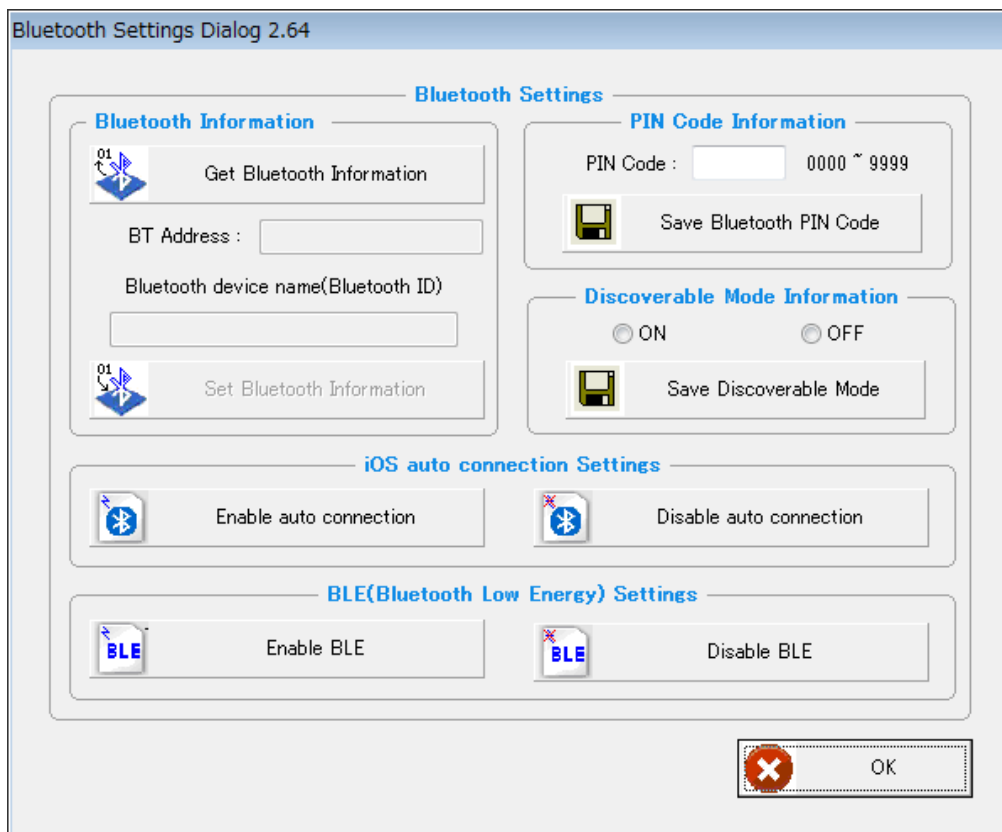
3. Bluetooth Interface settings

3-1. Start Bluetooth Settings

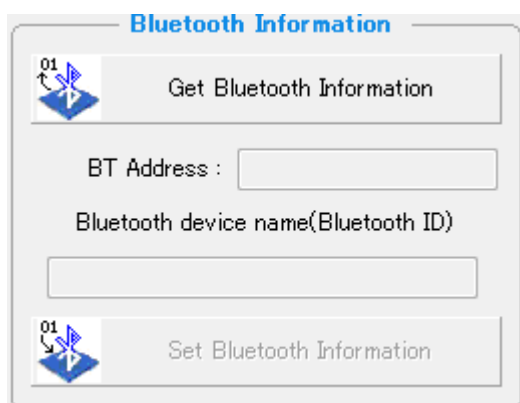
If you connect this software to the printer, "Start Bluetooth Settings" button on top screen of this software becomes effective. Then press the button.



Then the screen below shows up.



3-1. BT address and device name

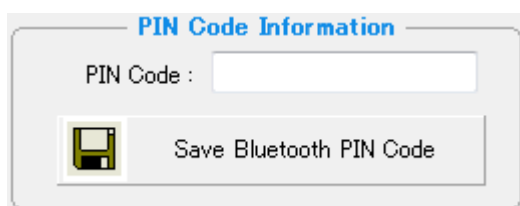


There is unique 12 digits BD address assigned to each Bluetooth module.

You can check the BD address by “Get Bluetooth Information” button,

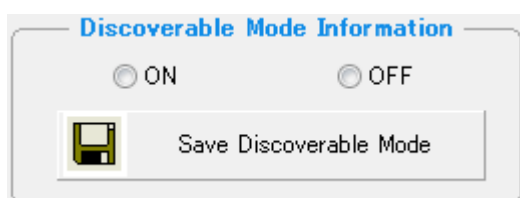
Bluetooth device name can be changed by “Set Bluetooth Information” however if the firmware version is old and does not support this function, the message “Not supported...” is shown.

3-2. PIN Code Information



When you try to connect to the printer via Bluetooth, you may be required to enter PIN code to establish the connection. In such case, you need to enter PIN code. Default PIN code is “0000”. To change the Bluetooth PIN Code, enter new PIN Code and press “Save Bluetooth PIN Code” button

3-3. Discoverable Mode Information



If you set “Discoverable Mode” ON, other Bluetooth devices (PDA, Smart Phone...) can detect the printer and if you set it “OFF”, other devices cannot detect the printer.

3-4. Auto Connection Settings



If the printer supports Auto connection setting of Bluetooth to iOS device and you want to disable the function or change back to enable the function, press Disable/Enable buttons.

3-5. Auto Connection Settings



There is no plan to use this function so far. So please keep it Disabled.

4. Wi-Fi Interface setting screen

Basic flow for settings is as follows.

Start=>Port Information=>Get Wi-Fi Information=>Change settings=>Save Wi-Fi Information

4-1 Start

On the start-up screen of the utility, press “Start Wi-Fi Settings” button.

(If the port of the utility is open for other settings, press “Close Port” first)



Then the screen below shows up.

Wi-Fi Settings Dialog 2.61

Port and Wi-Fi Information

Port Information

Port : BaudRate :
 Data Bits : Parity :
 Stop Bits : Flow Control :

Open Port
 Close Port

Wi-Fi Information

MAC address :
 SSID :
 IP :
 NetMask :
 Gateway :
 DNS :

Get Wi-Fi Information
 Save Wi-Fi Information
 TCP PORT :
 Exit

Wi-Fi Mode :
 Wi-Fi Channel :
 Wi-Fi Encryption :
 Wi-Fi Authentication :
 Using KEY ID :

WEP Key

KEY ID 1 :
 KEY ID 2 :
 KEY ID 3 :
 KEY ID 4 :

Progress :

WPA Authentication

WPA Authentication : WPA Encryption :
 WPA Key :

Enterprise Settings

4-2 Port Information

These are the settings of the port to communicate with printer for changing Wi-Fi settings.

You can connect the printer from PC by Serial (COM1 – COM9) or USB.

Port and Wi-Fi Information

Port Information

Port : COM1
 Data Bits : COM1
 Stop Bits : COM2
 COM3
 COM4
 COM5
 COM6
 COM7
 COM8
 COM9
 USB

BaudRate : 19200
 Parity : NONE
 Flow Control : DTR/DSR

Open Port
 Close Port

Wi-Fi Information

MAC address : 00:10:40:04
 SSID : 4004

Get Wi-Fi Information
 Save Wi-Fi Information

If you use Serial Port, you have to check the Port Settings between the printer & PC such as Baud Rate.

Port : COM1
 BaudRate : 19200
 Data Bits : 8
 Parity : NONE
 Stop Bits : 1
 Flow Control : DTR/DSR

Communication starts by pressing “Open Port” button.

4-3 Get Wi-Fi Information

After “Get Wi-Fi Information” button becomes effective by opening the communication port, press the button to read current Wi-Fi settings from the printer.

Wi-Fi Information

Get Wi-Fi Information

When reading the settings is finished, “Read Complete” message shows up,

Read Wi-Fi information

Read Completed !!!

OK

“WPS” button becomes effective by opening the communication port as well.

For the first communication with Access Point if you want to avoid entering details of settings, press this button first and then enable WPS function at Access Point. Necessary settings for Wi-Fi communication with the Access Point are automatically set and printer becomes ready to communicate via Wi-Fi

Here is the result of “Get Wi-Fi Information” with the printer of default setting.

Wi-Fi Settings Dialog 2.61

Port and Wi-Fi Information

Port Information

Port : USB BaudRate : 19200
 Data Bits : 8 Parity : NONE
 Stop Bits : 1 Flow Control : DTR/DSR

Open Port
 Close Port

Wi-Fi Information

MAC address : 84:72:07:38:00:10
 SSID : CMP_0010
 IP : 192 . 168 . 100 . 1
 NetMask : 255 . 255 . 255 . 0
 Gateway : 192 . 168 . 100 . 1
 DNS : 164 . 123 . 101 . 2

Get Wi-Fi Information
 Save Wi-Fi Information
 Exit
 Reset (Factory Settings)
 WPS


TCPPORT : 9100
☒ DHCP Settings
☐ LPD Enable
 LPD Queue Name : lpd1

Wi-Fi 5GHz Information

Country Name : USA Wi-Fi Country Channel : 36

Wi-Fi Band : 5GHz
 Wi-Fi Mode : SoftAP
 Wi-Fi Channel : 1
 Wi-Fi Encryption : WPA
 Wi-Fi Authentication : Both
 Using KEY ID : KEY ID 1

WEP Key
 WEP Key is a write-only.
 KEY ID 1 : HEX
 KEY ID 2 : HEX
 KEY ID 3 : HEX
 KEY ID 4 : HEX

Progress : 

WPA Authentication

WPA Authentication : WPA-PSK WPA Encryption : TKIP
 WPA Key : *****
 WPA Key is a write-only. The input range is 8 to 63 ASCII or 64 hex characters

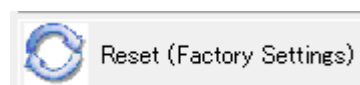
Enterprise Settings

4-4 Save Wi-Fi Information and Reset (Factory Settings)

After entering necessary changes, press “Save Wi-Fi Information” button to save the changes then changed Wi-Fi settings are saved on the printer.



If you want to go back to Wi-Fi initial settings, press Reset (Factory Setting) button.



4-5 Wi-Fi Setting Items

Followings are the explanation of each setting items.

Note: Please note that you cannot choose the invalid combination of setting items

SSID	This should be same as SSID of Access Point.
IP	Enter IP address for the Static IP address setting.
Net Mask	This is normally set for 255.255.255.0.
Gateway	Enter IP address of Access Point
DNS	If DNS server is used, enter the server address.
TCP PORT	If other port than 9100 is used for printing, changes here.
DHCP Settings	Check here if you use DHCP for IP address assigning (Note1)
LPD Enable	Check here if you use LDP for printing system.
LPD Queue Name	This is the name for LPD Queue.
Country Name	Choose country here for 5GHz channel allowed for each country.
Wi-Fi Country Channel	Choose the channel for 5GHz.
Wi-Fi Band	Choose Wi-Fi band from either 2.4GHz or 5GHz
Wi-Fi Mode	Choose Wi-Fi mode from Infrastructure / Adhoc / SoftAP (Note2)
Wi-Fi Channel	Choose from 1-14 for 2.4GHz channel
Wi-Fi Encryption	Choose Encryption mode from No / WEP64 / WEP128 / WPA / 802.1x
Wi-Fi Authentication	Choose Authentication method from None / Open System / Shared Key / Both
Using KEY ID	Choose WEP KEY from 1 to 4 => Need to enter Key ID column accordingly
WPA Authentication	Enter WPA Key for WPA encryption (Note3)

Note1

If DHCP Setting is enabled, printer receives IP address from DHCP server. Normally, it is recommended to use static IP address for the printer.

The timing to get IP address from DHCP server is either power on or closing cover. If IP address is assigned successfully to the printer, IP address is printed and if it fails, buzzer sounds.

Note2

Adhoc: As Adhoc is not stable, we do not recommend using it.

SoftAP: With this function, printer works as Access Point and the host communicate with the printer directly.

SSID of the printer in SoftAP mode is CMP-_xxxx(xxxx is last 4 digits of Mac Address).

If you search the printer in SoftAP mode from the host and choose CMP-xxxx then IP address 192.168.100.1 is assigned to the host. (Printer IP address is fixed as 192.168.100.10.)

Note3

As strong security, you can choose WPA PSK (TKIP) and WPA2 PSK (AES).

Choose WPA in Wi-Fi Encryption and choose either WPA or WPA2 then enter WPA key here.

4-6 Enterprise Settings

If you choose 802.1x in Wi-Fi Encryption, "Enterprise Settings" button becomes effective.



To use this function, Radius server is required.

Enterprise Settings

Enterprise Security : None WPA Type : None

EAP ID : None

EAP PASSWORD : PEAP

TLS

TTLS

Accept

Cancel