Set-up Manual for IFBD-HI01X/02X

Wireless LAN Printer
WebPRNT
CloudPRNT

STAR MICRONICS CO.,LTD.

Rev1.3

IFBD-HI01X/02X with Star Printer – How to setup

1. Introduction

IFBD-HI01X/02X is supporting the following printers.

Interface Board model	Printer model	Printer Firmware		Interface Firmware
		Boot Version	Main Version	
IFBD-HI01X	TSP650II	1.0 or later	1.0 or later	1.1 or later
	TSP700II	2.0 or later	3.0 or later	1.2 or later
	TSP800II	1.0 or later	1.2 or later	1.2 or later
IFBD-HI02X	SP700	2.0 or later	3.0 or later	1.2 or later

The printer with IFBD-HI01X/02X can be worked as USB Printer, LAN Printer, and Wireless Printer by using Wireless LAN dongle.

In addition, the printer with IFBD-HI01X/02X can be WebPRNT Printer and CloudPRNT Printer.

[Notes]

When changes the printer setting (e.g. Memory Switch Settings, Register Logo Setting, Printer F/W・Font writing…), then please turn off and on the printer power to apply the changed settings on the IFBD-HIX I/F and Printer correctly.

IFBD-HI01X/02X is supporting the following printer drivers.

Driver	StarPRNT Intelligence CD			CUPS Driver (Web Release)	JavaPOS Driver (Web Release)
Version	Printer Driver Ver. 2.0 or later	OPOS Ver1.13.2 or later	StarIO Ver1.2.2 or later	Linux: Ver3.1.1 Mac: Ver3.1.1 or later	Ver1.9.13 or later
Support	○*3	○*1	○	○ *2 *4	○

*1 : OPOS driver with USB is supported from HI01X/02X firmware version 1.2.

*2 : To use CUPS driver, LPR must be set Enable from WebUI. (Default is Disable)
To use LPR, 9100 port also must be set Enable.

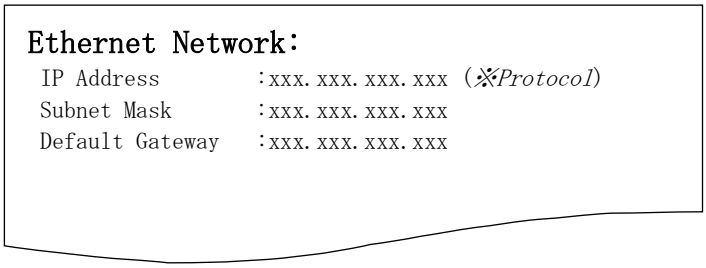
*3 : When use PSA Logo Store tool with TSP650II,
please “Reload” Logo again if it is failed to “Reload” the registered Logo from the printer.

*4 : To use CUPS driver with Star Cloud Services, the ”Fixed Length” of “Page Type” can not use correctly. The printing result becomes same as “Variable Length” of “Page Type”.

2. Web configuration utility

The web configuration utility is located in HI01X/02X. It is shown below how to access to the web configuration utility.

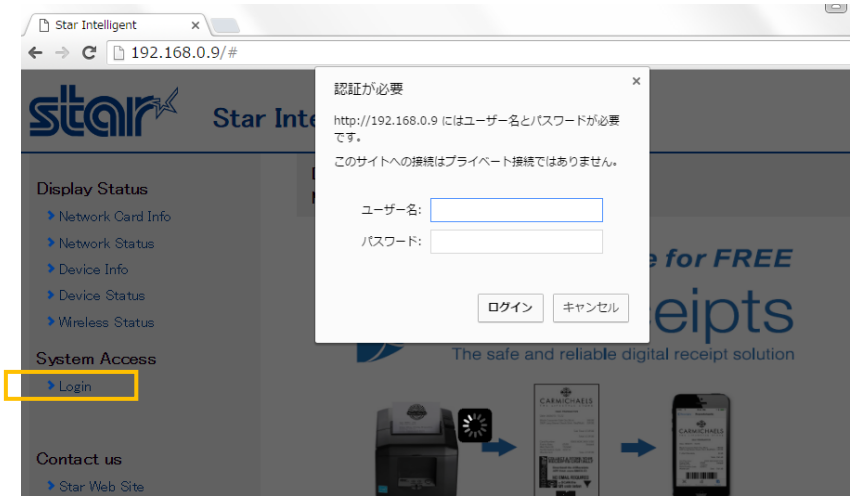
1. Check the IP address of the IFBD-HI01X/02X by self-print by following below procedure.
   - Connect Ethernet cable to the IFBD-HI01X/02X - Printer.
   - Turn on the IFBD-HI01X/02X - Printer with pushing the feed button for 5 seconds.
   - The IP address of the IFBD-HI01X/02X - Printer is shown in 2nd print paper.



2. Put IP address of IFBD-HI01X/02X into the web-browser. Then the web configuration utility is shown.

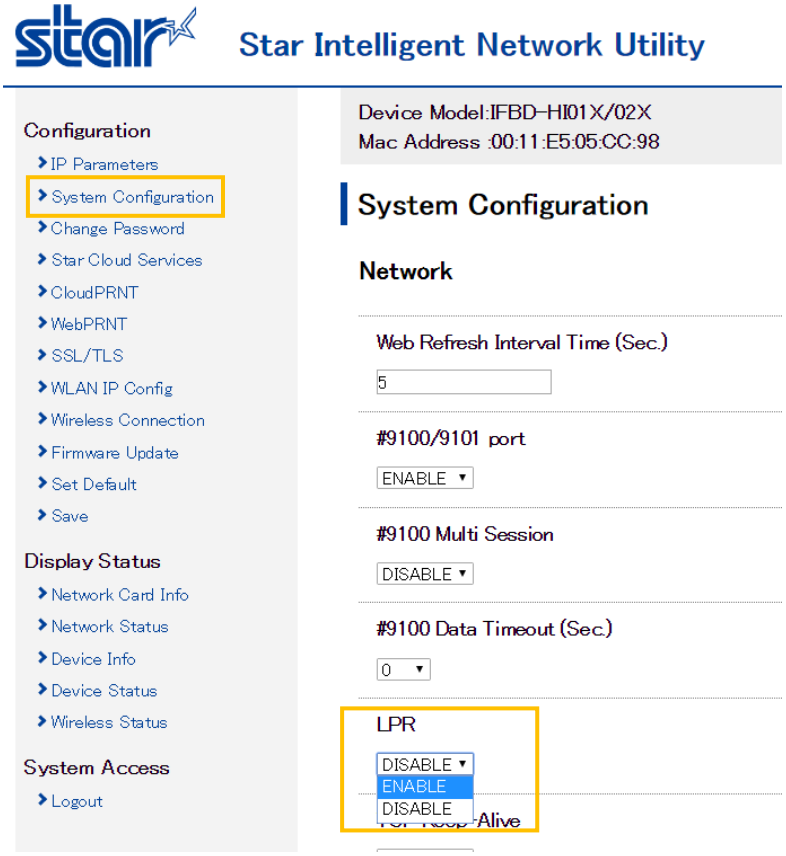
3. To enter the setting of HI01X/02X page, click “Login” and put user name and password.

User name: “root” , Pass word: ”public” as factory setting.



Example : changing LPR setting from Disable to Enable

In the screen below, select [System Configuration] from left menu, and select LPR: ENABLE.



Then, click Submit in the bottom of this screen.

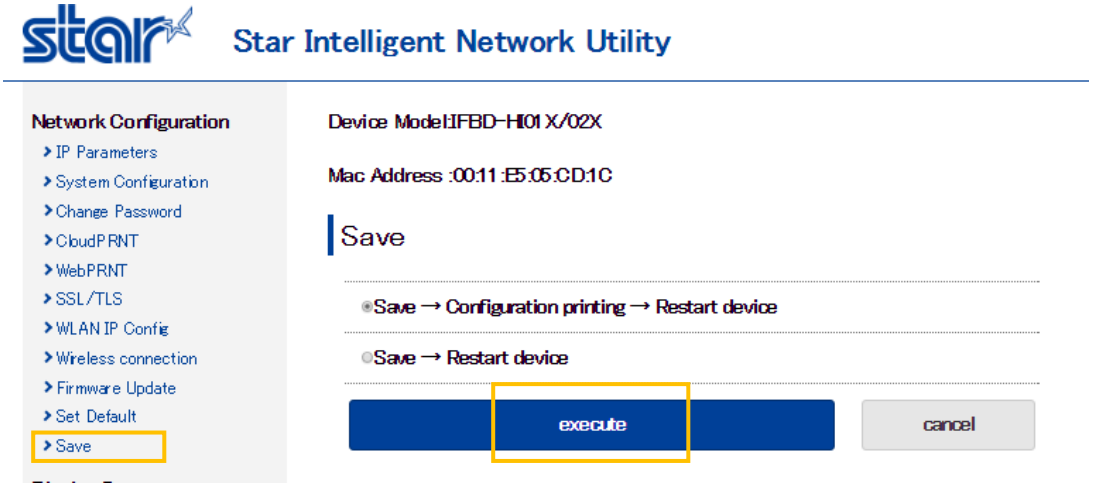
4. Click the menu [Save].

Select any of the following, the click Execute:

・Save → Configuration Printing → Restart device

・Save → Restart device

(After the set print is output, when you select, Configuration Printing) Wait for the printer to reset.



Fin

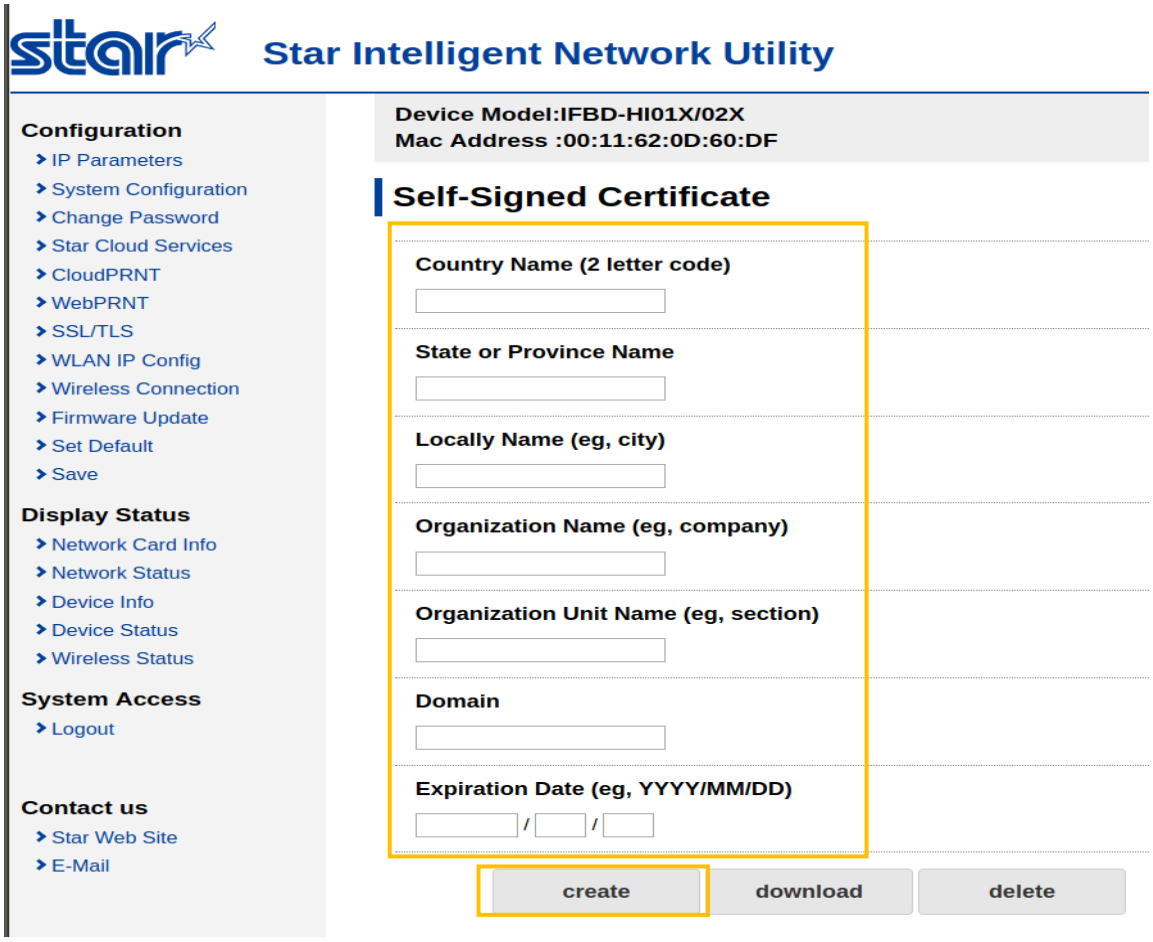
■How to set SSL/TLS setting for web server of IFBD-HI01X/02X.

SSL/TLS setting can be select self signed certificate made by I/F or custom ca-certificate.
This SSL/TLS setting is stored in this product's non-volatile memory.

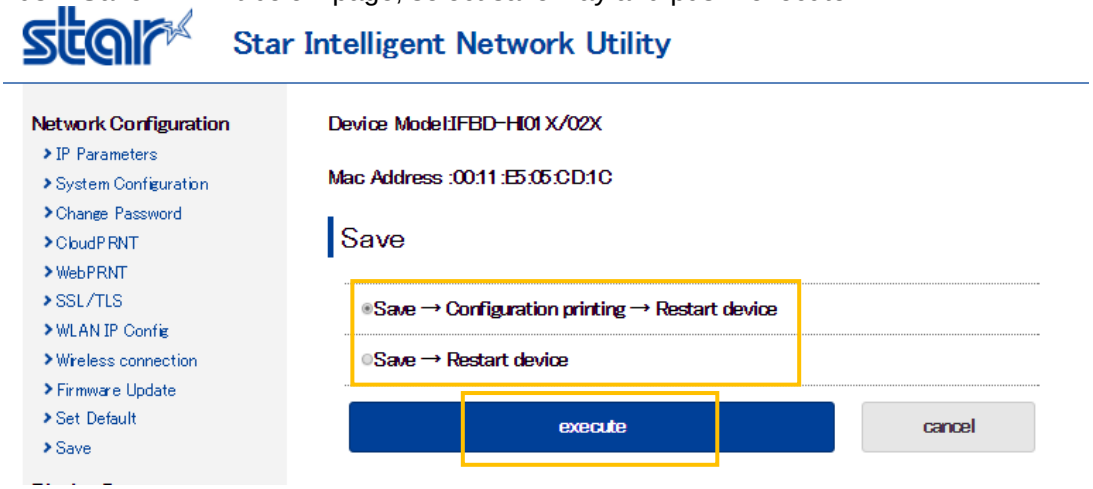
1. Select "Create Self-Signed Certificate".

2. Input each items to create self- signed certificate as followings and push “create”.

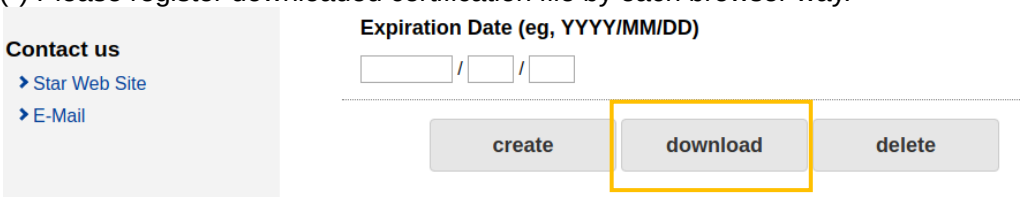
Variable name	Max length of string	*[Example]*	Default value
Country Name (2 letter code)	2	*JP*	(Blank)
State or Province Name	128	*Shizuoka city*	(Blank)
Locally Name (eg, city)	128	*Shimizu-ku, Nanatshushinya*	(Blank)
Organization Name (eg, company)	128	*Star Micronics Co., ltd.*	(Blank)
Organization Unit Name (eg, section)	128	*Software Section*	(Blank)
Domain (eg, IP Address)	128	*192.168.1.175*	(Blank)
Expiration Date (eg, YYYY/MM/DD)	2015.01.01 to 2049.12.31	*2020/12/31*	(Blank)



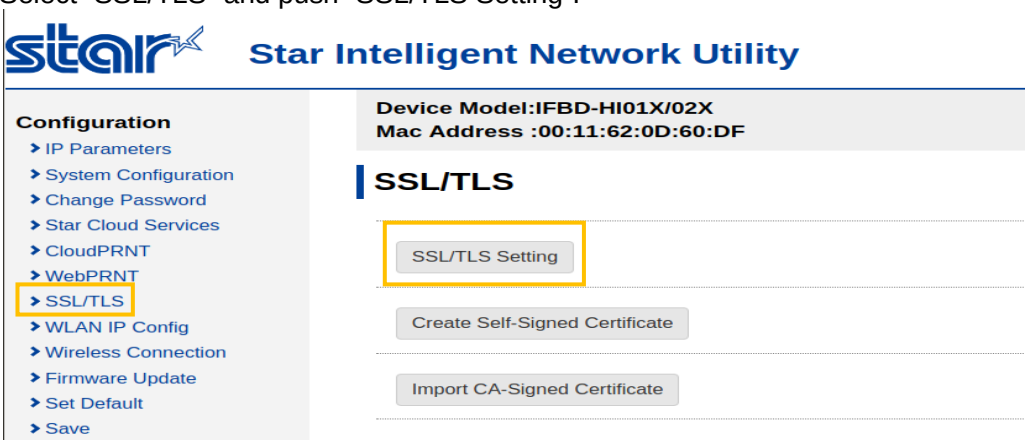
3. Push “Save” link. At below page, select save way and push “execute”.



4. After reboot printer, then select “SSL/TLS->Create Self Certificate” again and push “Download” to get created self-signed certificate for registering on web browser(*).
(*) Please register downloaded certification file by each browser way.

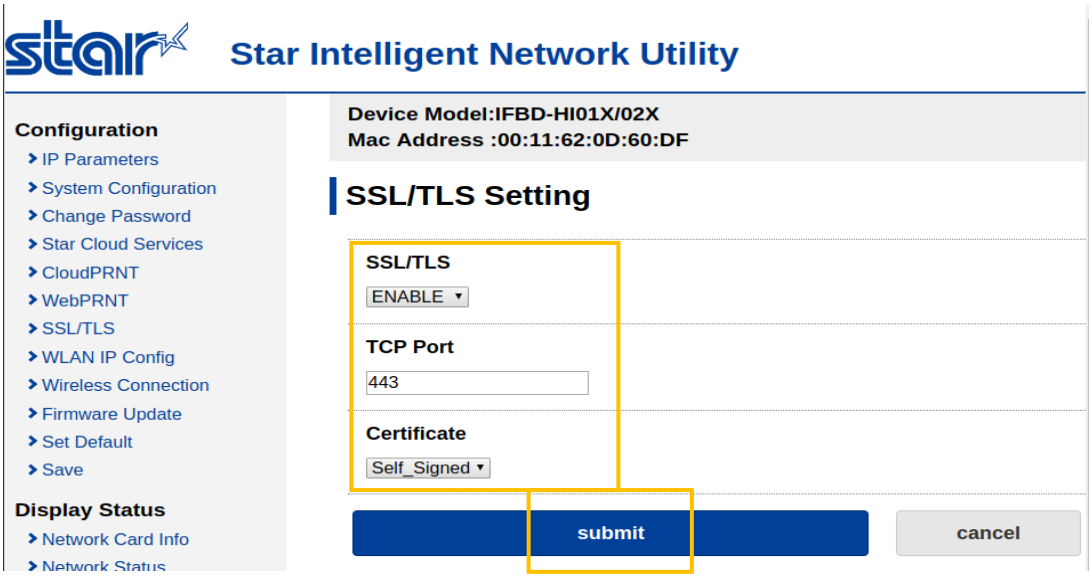


5. Select “SSL/TLS” and push “SSL/TLS Setting”.



6. Input each items at “SSL/TLS Setting”. And push “submit”.(In this case, choose “Self_Signed”)

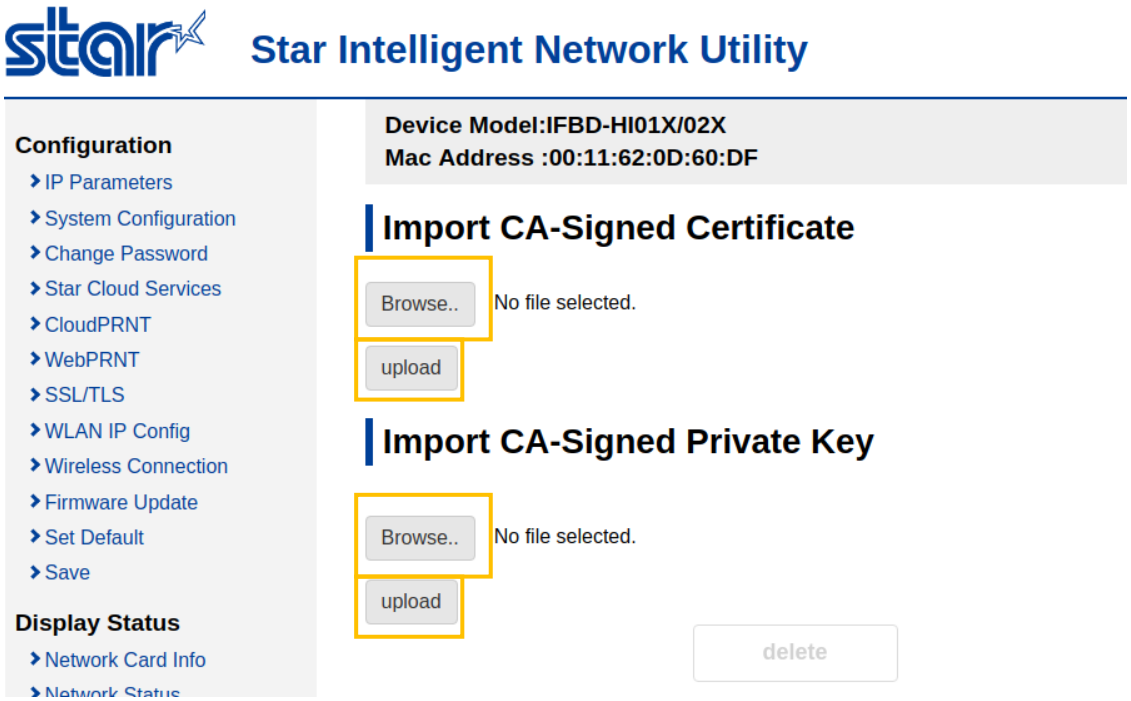
Setting Items	Input Range (*)	Initial Value (Factory Default)
SSL/TLS	ENABLE / DISABLE	DISABLE
TCP Port	1 ～ 65535	443
Certificate	Self_Signed/CA-Signed	Self_Signed



7. Push “Save” link. At below page, select save way and push “execute”(Same as “3.”).
   It can access to https://[Printer IP Address] after reboot.

Fin.

[If use custom “CA-Signed Certificate”]
Please select “SSL/TLS” and push “Import CA-Signed Certificate” on “1.”.
And please upload custom CA-Signed Certificate and Private Key by “Browse” and “Upload”.



Fin.

3. Firmware Update

It is shown below how to update the firmware. This product allows uploading F/W from Web UI.

There are 2 ways for uploading. One is online updating from Star Cloud Service. The other is offline updating from a local file.

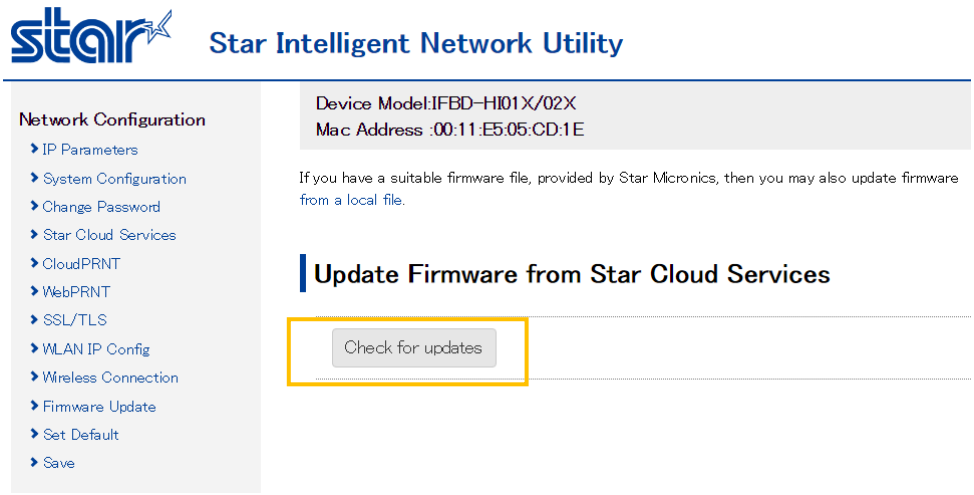
The current firmware version can be confirmed from [Network Card Info] menu of WebUI

A. Updating from Star Cloud Service (Online)

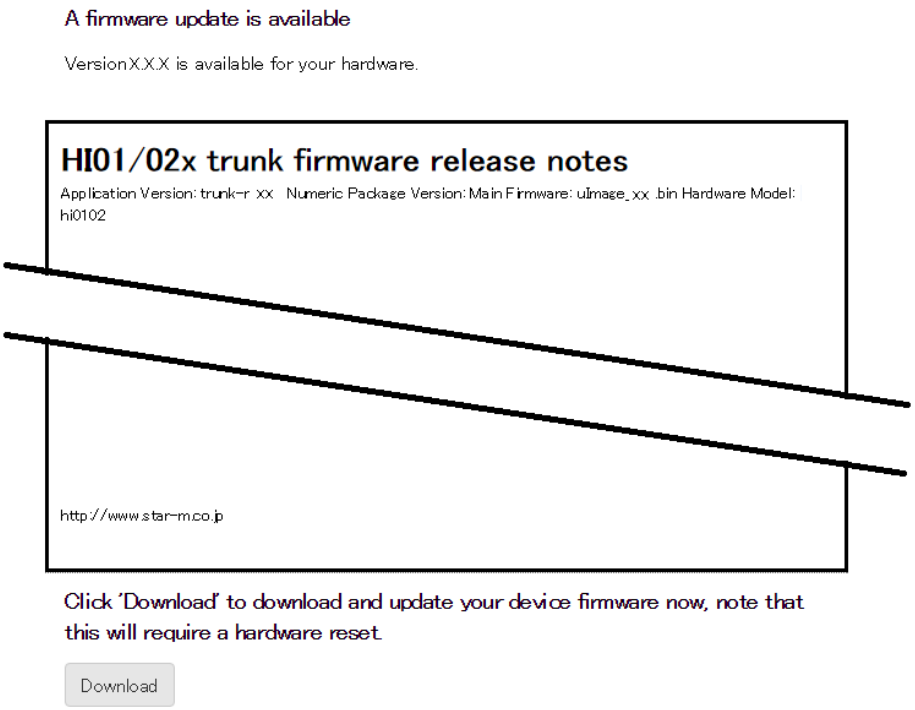
This procedure can be valid in the case of the network connecting internet.

A-1. Click "Network Configuration" ->Firmware Update.

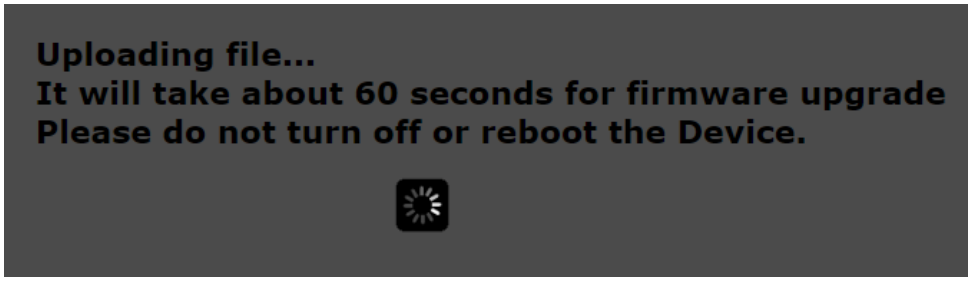
A-2. Click [Check for updates]



A-3. If the latest firmware data is available, version number and release note are shown as below.

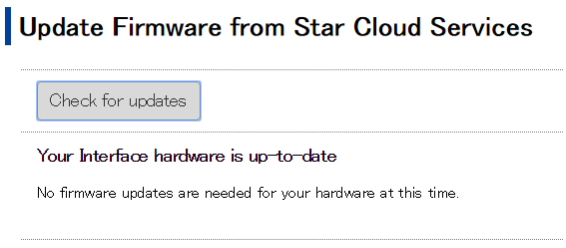


A-4. After clicking the download button, when all data has been confirmed to be correctly received, start writing to the Flash ROM with below screen.



After writing to the Flash ROM ends correctly, the printer will automatically be reset. Writing takes several minutes. Absolutely never turn off the power or apply a reset prior to final reset being applied. If terminated partway, the Flash ROM data will be damaged, and later it may not start up.

* If your current firmware version is latest, [Your Interface hardware is up-to-date] is expressed, and no need to update firmware.

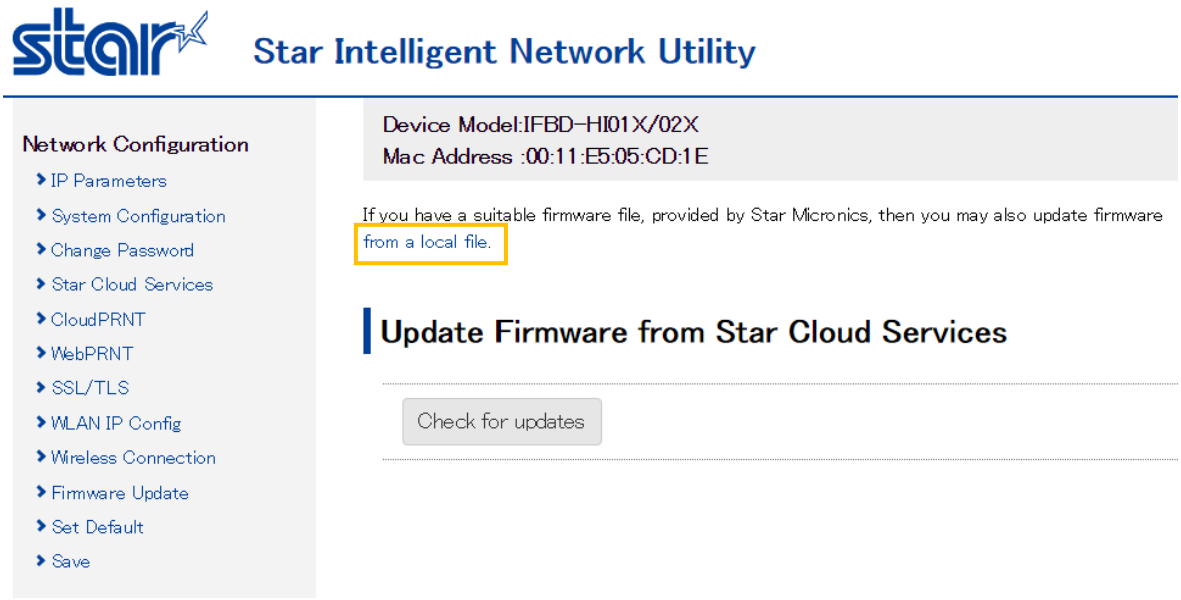


B. Updating from a local file (Offline)

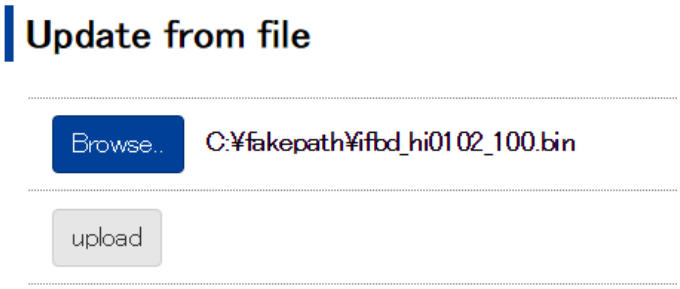
For this procedure user must obtain a F/W file from Star Micronics in advance.

B-1. Click "Network Configuration" ->Firmware Update.

B-2. Click [from a local file]

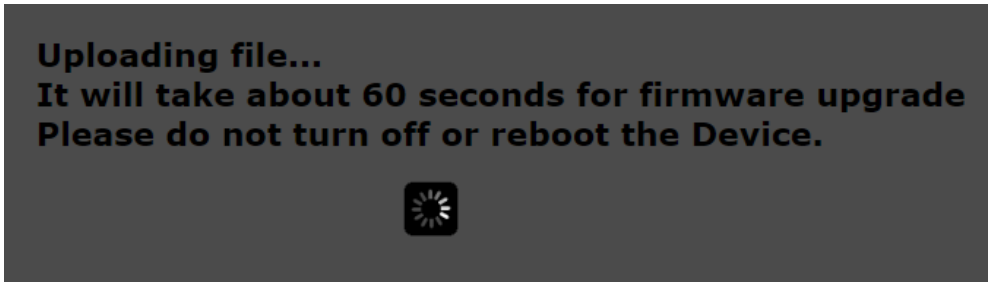


B-3 . Click [Browse] button, and select a firmware file.



B-4. Click "upload" button.

When all data has been confirmed to be correctly received, start writing to the Flash ROM with below screen.



If writing to the Flash ROM ends correctly, the printer will automatically be reset. Writing takes several minutes. Absolutely never turn off the power or apply a reset prior to final reset being applied. If terminated partway, the Flash ROM data will be damaged, and later it may not start up.

Fin.

4. WLAN dongle setting

The following list shows the Wireless LAN dongle tested by Star.

WLAN chipset	Brand	Model	Test result
RTL8188CUS	PLANEX	GW-USNANO2A	✔
	TRENDnet	TEW-648UBM	✔
	EDIMAX	EW-7811UN	✔
	NETGEAR	WNA1000M	✔
RTL8812AU	PLANEX	GW-900D	✔ *1
	Buffalo	WI-U2-433DM	✔
	TRENDnet	TEW-805UB	✔ *1
	TP-LINK	Archer T4U Ver.1	✔ *1
	TP-LINK	Archer T4U Ver.2	✔ *1 *2
	D-Link	DWA-182 rev C1	✔ *1
	LINKSYS	WUSB6300	✔ *1
RTL8192DU	Aus Linx	AL-9904R3	✔

*1 In case of SP700, the dongle cannot mount directly to USB-A port due to the dongle size.
In this case please use other dongle or use a general USB extension cable.

*2 Interface F/W version 1.3 or later is required to be supported.

■How to set WLAN IP configuration by using WLAN dongle.

For the setting to connect to access point, there are 2 methods. One is from WebUI, and the other is by using USB memory.

A. Setting from WebUI

Access the WebUI by wired LAN connection with WLAN dongle inserted.

A-1. Access the homepage for administrator (http://IP Address/home.html).

(Example: For IP address = 192.168.10.1,access http://192.168.10.1/home.html)

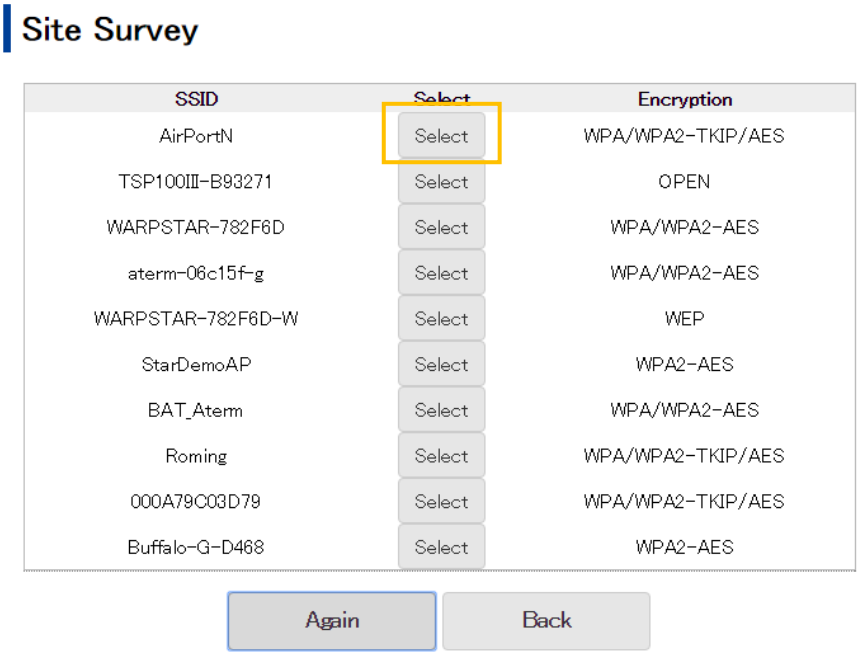
A-2. Login with User Name and Password (UN: "root" and PW:"public" as factory setting)

A-3. Click "Network Configuration" ->Wireless Connection.

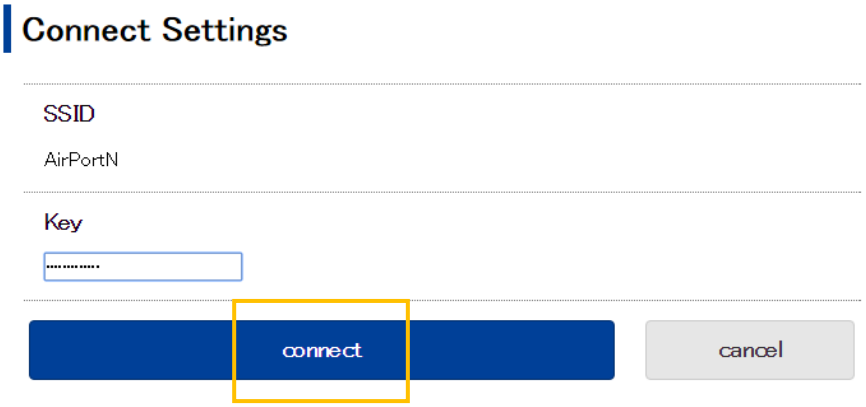
[Method by automatic access point searching]

A-4. Click [Enter] of Site Survey.

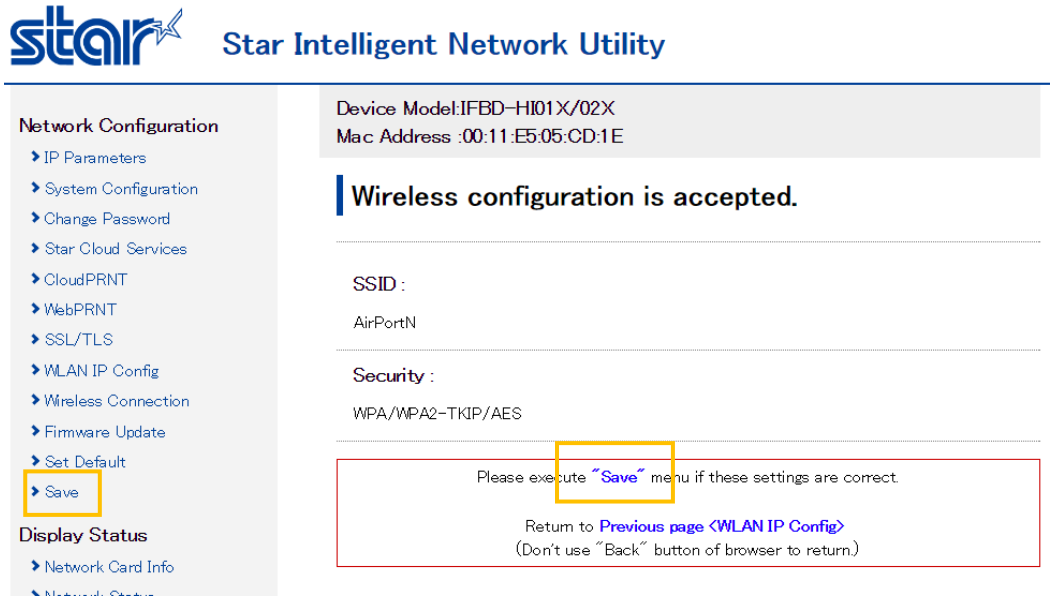
A-5. Then found access point are listed. Click [Select] of access point to connect.



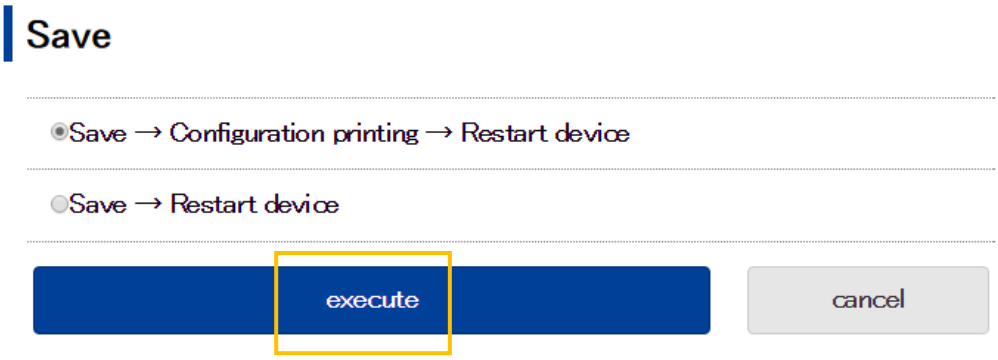
A-6. Input the Key, and click [connect].



A-7. Click [save] menu or “save” link to save the setting. In this case, do not click back button of the browser, otherwise setting is disappeared.



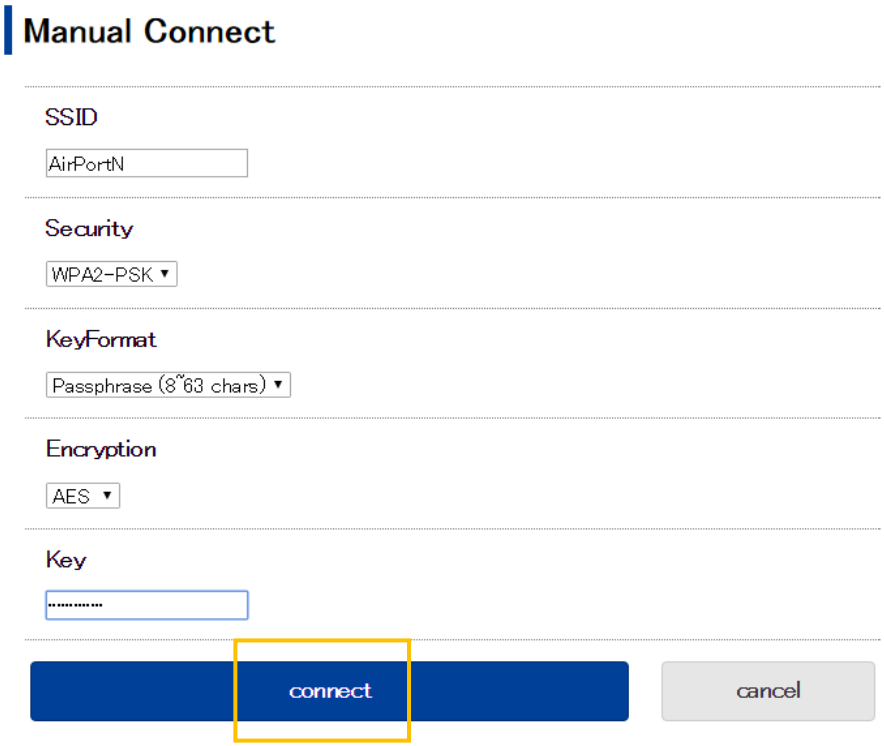
A-8. Select [Save -> Configuration printing -> Restart device] for rebooting with setting print, or [Save -> Restart device] for rebooting without setting print, and click [execute]. Then printer executes reboot and setting is finished.



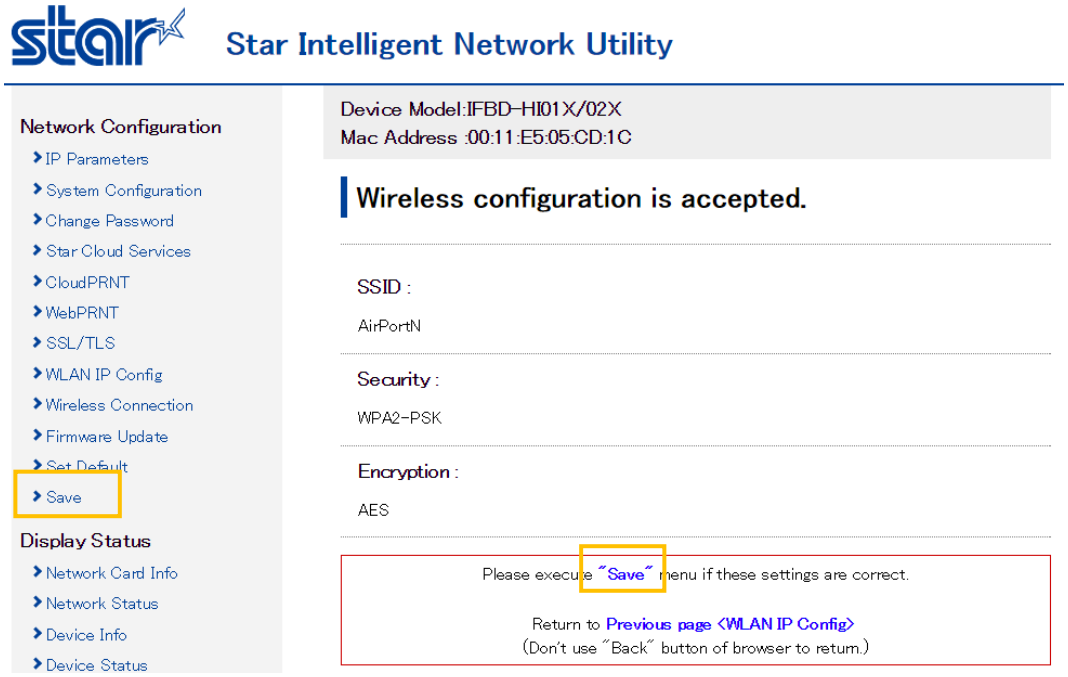
Method by inputting the setting manually

A' -4 Click [Enter] of Manual Connect.

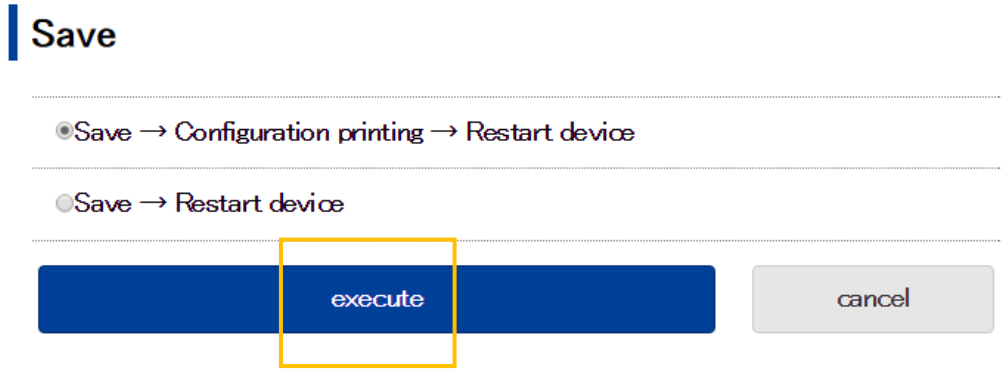
A' -5 Input the setting of access point manually and click [Connect].



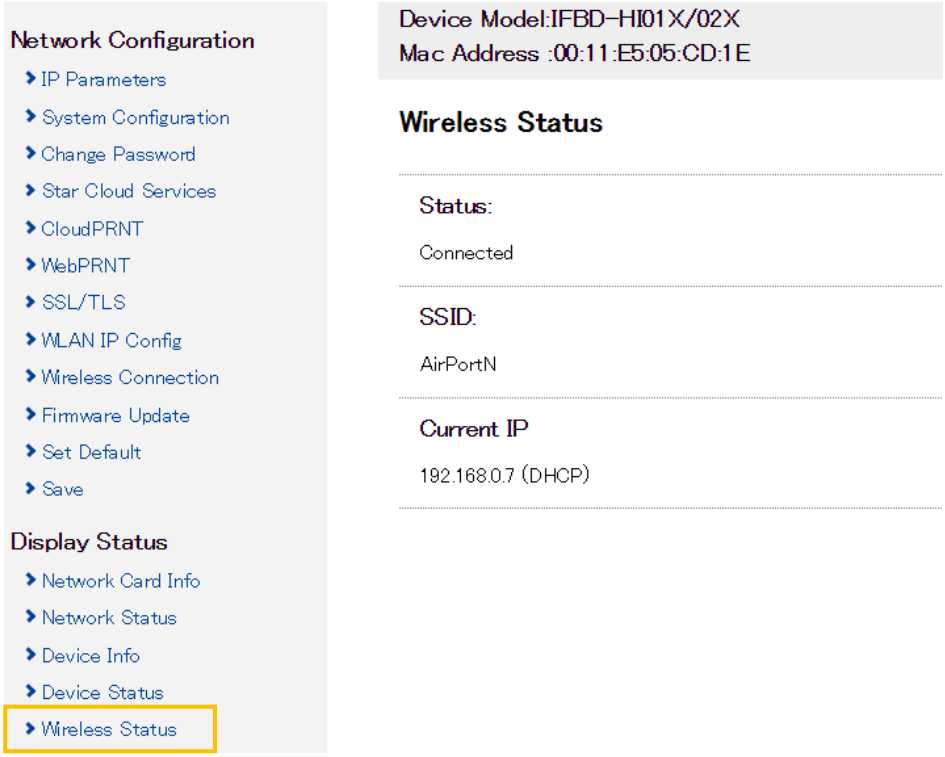
A' -6 Click [save] menu or "save" link to move to save menu. In this case, do not click back button of the browser, otherwise setting is disappeared.



A' -7 Select [Save -> Configuration printing -> Restart device] for rebooting with setting print, or [Save -> Restart device] for rebooting without setting print, and click [execute]. Then printer executes reboot and setting is finished.



Wireless connection status can be confirmed from [Wireless Status] menu of WebUI.



B Setting by USB memory

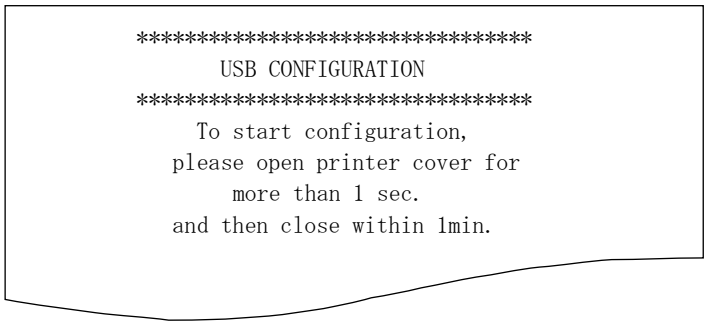
This product allows changing the network setting by generic USB memory that stores a specified setting file.

・Procedure of WLAN setting by USB memory

B-1. An operator connects USB memory (FAT32 formatted) which has "star-hix.conf" file to this product with printer power OFF status. For the details of this file, see the bottom of this section.

B-2. Turn ON the printer with FEED button pushing. (Self printing is conducted.)

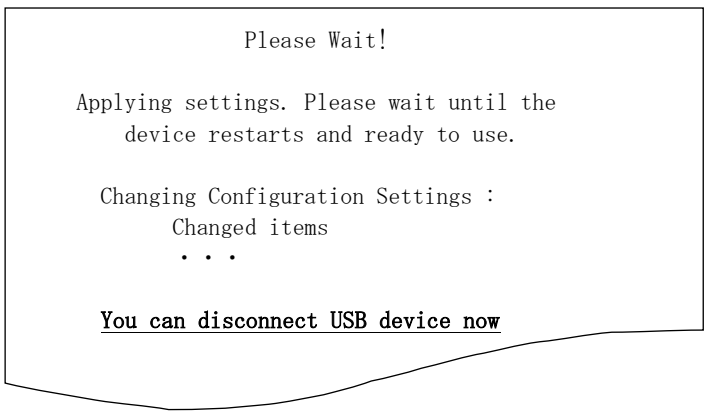
If USB memory is correctly mounted, and "star-hix.conf" file parameter is correct, then below printing is conducted.



If there is no "star-hix.conf" file in USB memory, printer prints "USB configuration mode cancelled", or if "star-hix.conf" file parameter is incorrect, printer prints "Authentication Error", and setting mode is canceled.

B-3. An operator executes printer cover open 1 second or more and close within one minute after 2. If printer cover open and close is not executed within one minute, printer prints "USB configuration mode cancelled", and setting mode is canceled.

B-4. Printer starts reading a setting of "star-hix.conf". When reading is finished correctly, below printing is conducted.



USB memory can be taken out after this printing.

B-5. Printer reboots automatically. Then setting are changed.

・Configuration file specification

File name : star-hix.conf （fixed）

File path : root directory of USB memory（fixed）

File format : text file, field name and value must be divided by semicolon.

	Field Name	Value and details
Root password (with SHA256)	auth	An SHA256 hash of the root password. If supplied then this must match the printer internally stored hash. If they do not match, then settings will not be installed. If not provided, then the password is not checked, so the user confirmation must be relied on alone to approve the configuration change. Some settings will not be applied if no auth field is provided. (*)
WLAN setting	ssid	SSID of the Wireless network to connect to.
	security	Set to OPEN, WEP-OPEN, WEP-KEY, WPA-PSK or WPA2-PSK to specify the security type.
	defwepkey	In a WEP-KEY (WEP with key) network, this specifies a value from 1 to 4 to indicate the default key to use.
	encryption	In a WPA or WPA2 network, specify the encryption method to use, either TKIP, or AES
	key	Specify the pre-shared key for this network. The key format will be determined b the length.
	wifi_ip	Specify "DHCP" to use DHCP assigned address, or set to a valid IP address to use static IP
	wifi_subnet	Specify the subnet address, if a fixed IP was specified for the ip field. If ip is set to DHCP, then this field is ignored.
	wifi_gateway	Specify the gateway address, if a fixed IP was specified for the ip field. If ip is set to DHCP, then this field is ignored.
	eth_ip	Specify "DHCP" to use DHCP assigned address for Ethernet, or set to a valid IP address to use static IP
	eth_subnet	Specify the Ethernet subnet address, if a fixed IP was specified for the eth-ip field. If eth-ip is set to DHCP, then this field is ignored.

	eth_gateway	Specify the Ethernet gateway address, if a fixed IP was specified for the eth-ip field. If eth-ip is set to DHCP, then this field is ignored.
Password setting(*)	rootpassword	Set a new 'root' user password for accessing the configuration UI. This setting will only be applied if the auth field was also supplied. (*)
	userpassword	Set a new 'user' user password for accessing port 22222 functions. This setting will only be applied if the auth field was also supplied. (*)
USB memory setting function valid/invalid	usbconfig	Set to ENABLE or DISABLE to control the USB configuration function. If set to DISABLE, then USB configuration will be blocked after settings are applied. To re-enable, a user will have to log-in to the WEB configuration UI and manually enable the ""USB Configuration"" option.
CloudPRNT setting (Supported from I/F version 1.3)	cloudprnt_enable	Set to ENABLE or DISABLE to control the CloudPRNT service
	cloudprnt_url	Set to URL of CloudPRNT service.
	cloudprnt_interval	Set CloudPRNT Polling time in sec (Range: 1 to 7200, Default value is 5)
	cloudprnt_user	Set user name registered on CloudPRNT server. (Optional)
	cloudprnt_pass	Set password registered on CloudPRNT server. (Optional)
	cloudprnt_certlevel	Set CloudPRNT certification level. (0 as default) 0: Use Bundle of CA Root Certificates(Mozilla as of: Thu Jun 18 14:06:27 2015) 1: Use custom CA certificate. (Registered by Web UI on CloudPRNT setting) 2: Accept all (Warning - not secure)
Disconnect Message (Supported from I/F version 1.3)	eth_disconnectmessage	Set to ENABLE or DISABLE or AUTO to control Disconnect Message function for Wired network.
	eth_line1	Set first line of message
	eth_line2	Set second line of message
	eth_line3	Set third line of message
	eth_line4	Set fourth line of message
	wifi_disconnectmessage	Set to ENABLE or DISABLE or AUTO to control Disconnect Message function for Wireless network.
	wifi_line1	Set first line of message
	wifi_line2	Set second line of message
	wifi_line3	Set third line of message
	wifi_line4	Set fourth line of message

(*) It is possible to change under the condition that auth parameter setting is valid.

"star-hix.conf" example :

```
#   Configuration file for star-hix
#     Configured by USB stick.
#


#auth: efa1f375d76194fa51a3556a97e641e61685f914d446979da50a551a4333ffd7
#WifiSettings
ssid: 000A79C03D79
security: WPA2-PSK
encryption: AES
key: 71428246
wifi_ip: DHCP
wifi_subnet:
wifi_gateway:
```

(# columns are ignored)

[Reference] How to convert Root password with SHA256

e.g. case of root password = “public”

1. Visit free SHA256 HASH generating web site like below.

   http://www.xorbin.com/tools/sha256-hash-calculator

   http://hash.online-convert.com/sha256-generator

   http://www.timestampgenerator.com/tools/sha256-generator/

2. Input the text “public” to text box of the converting site.

3. Below result is calculated. Then copy the text and paste to auth field of "star-hix.conf".

(converted result) : efa1f375d76194fa51a3556a97e641e61685f914d446979da50a551a4333ffd7

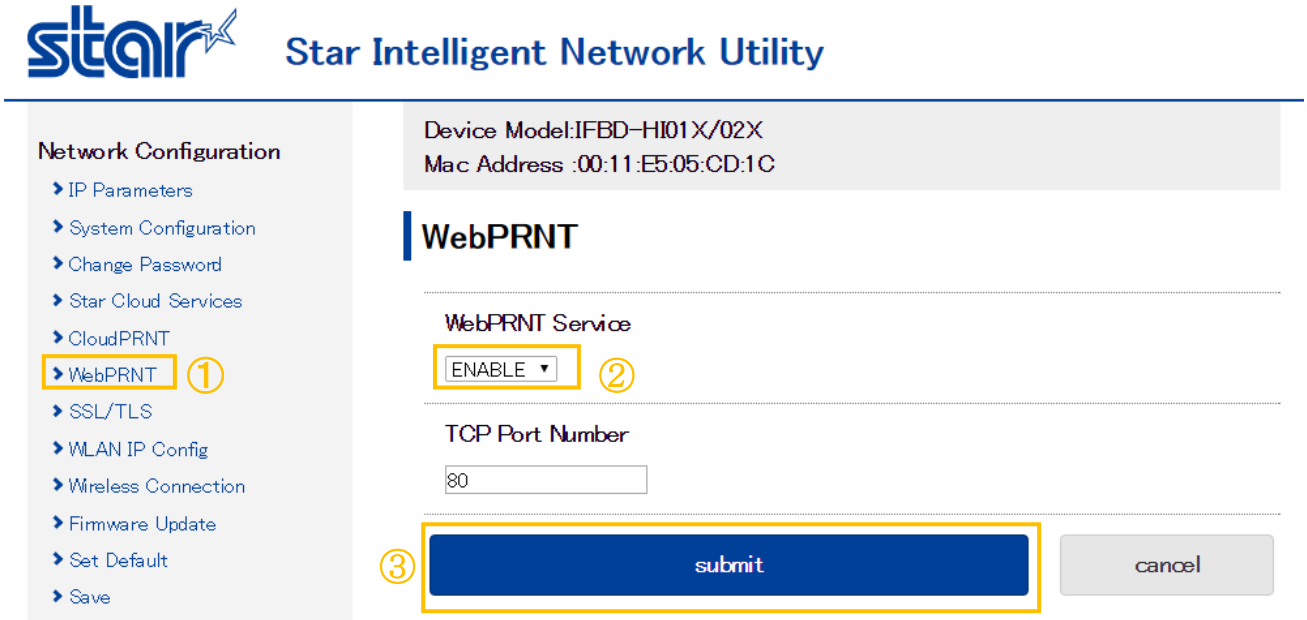
5. WebPRNT

■How to enable WebPRNT in HI01X/02X

*The default setting of WebPRNT is “Enable”

Visit the web configuration utility to enable WebPRNT.

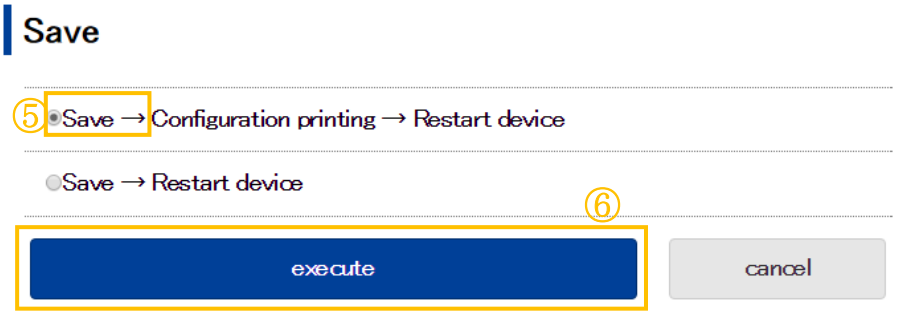
1. Select “Web Print” after “Login”
2. Select “ENABLE” in WebPRNT Service section
3. Click “Submit” button.



4 The following message is shown. Select “Save”.

5 Select “Save-> Configuration printing -> Restart device”

6 Click “execute” button. Then printer executes reboot and setting is finished.



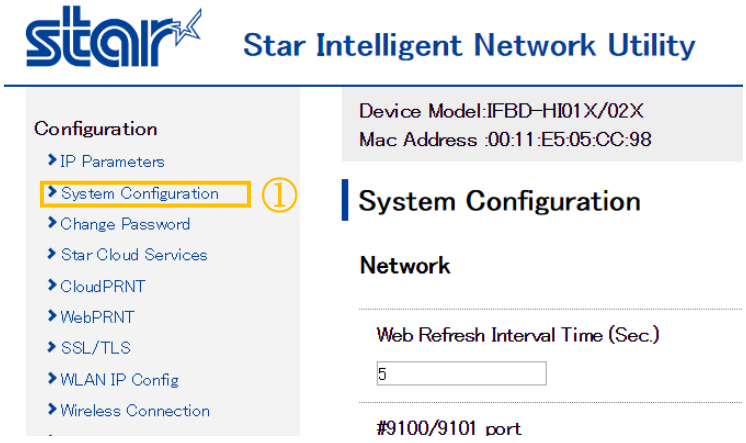
Fin

■How to set BCR for WebPRNT (example: mPOP-BCR)

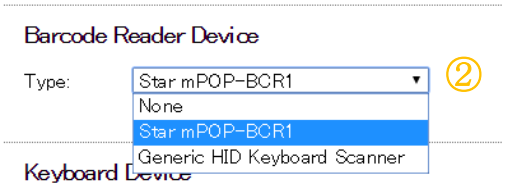
From I/F firmware ver. 1.2, you don't need to change to HID class setting for mPOP-BCR

Visit the web configuration utility.

1. Select [System Configuration] menu



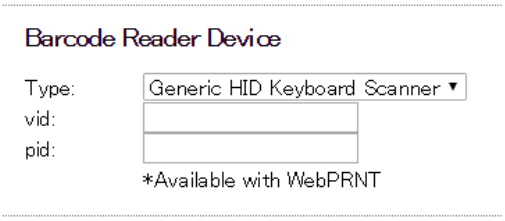
2. Select mPOP-BCR in [Barcode Reader Device]. (Firmware Version 1.2 or later)



* For other HID BCR, select [Generic HID Keyboard Scanner] and put VID and PID of Barcode Reader Device. In this case, "a" to "f" must be input as lower case.

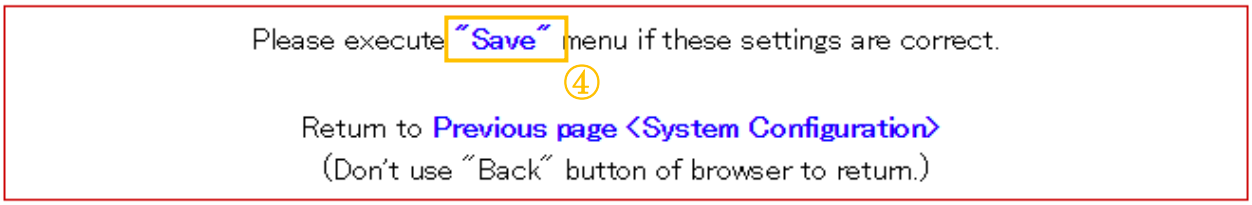
You can check the BCR of VID and PID by Windows "Device manager"

(Windows button > Computer > Manage (right click)



3. Click "Submit" button on the bottom of web page..

4 The following message is shown. Select “Save”.



5 Select “Save-> Configuration printing -> Restart device”

6 Click “execute” button. Then printer executes reboot and setting is finished.

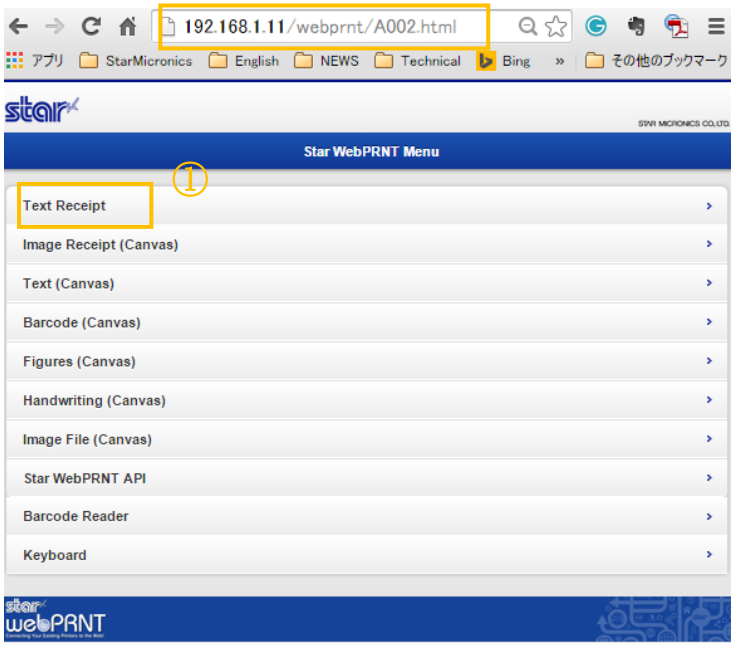
Fin

■WebPRNT demo

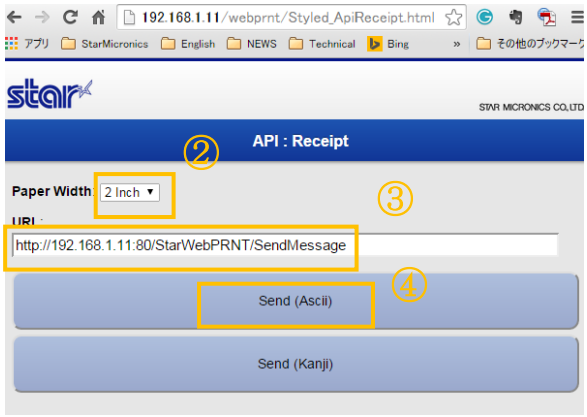
Open the web browser (Safari, Chrome) and put "http://**IPaddress**/webprnt/A002.html" into web-browser to visit WebPRNT demo site. WebPRNT demo site which is located in IFBD-HI01X/02X is shown as below.

<Print demo>

1. Select "Text Receipts" to make print demo



2. Select "3 inch" at Paper Width.
3. Put "http://"**IPaddress**":80/StarWebPRNT/SendMessage"into the URL of web app sample.
4. Click "Send" button. Then the printer prints a receipt.



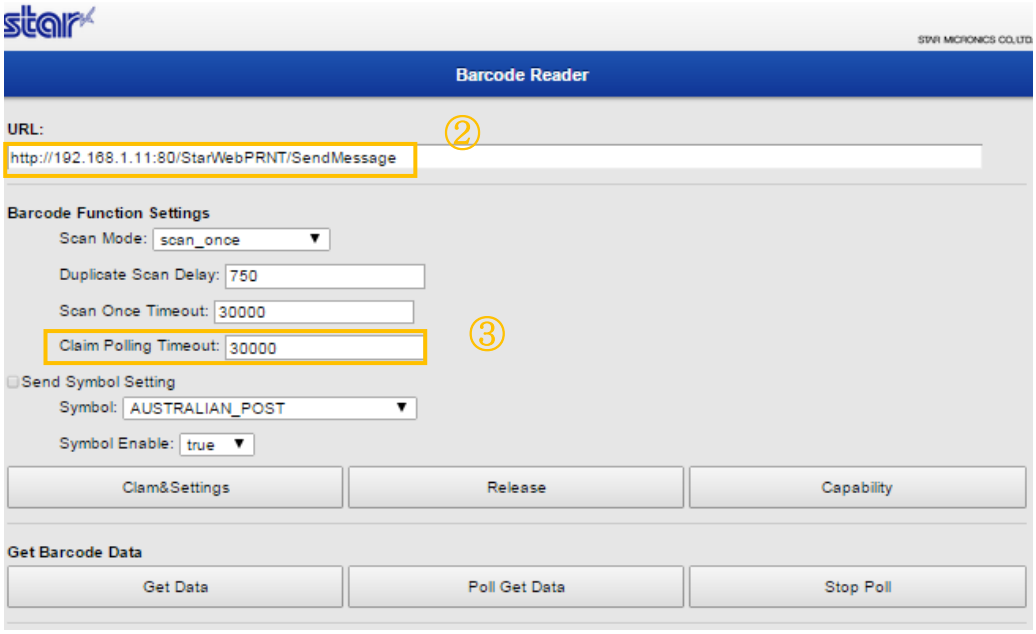
Fin

<Barcode reader demo>

Note: Before making BCR demo you have to set BCR information (VID, PID).
Please see previous section for the detail.

1. Select “Barcode Reader”.

2. Put “http://”**IPaddress”**:80/StarWebPRNT/SendMessage“into the URL of web app sample.
3. Set the claim polling timeout.



Fin

4. Click “Clam & Settings”, then the following messages are shown in “Response”

e.g. ————————————————————

- onReceive -

TraderBCRSuccess : [true]

TraderBCRCode : [0]

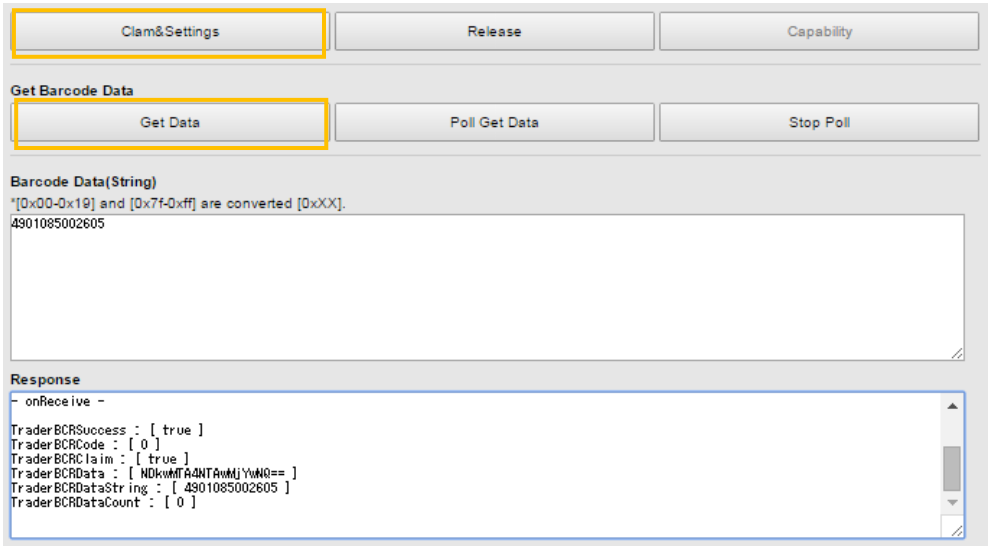
TraderBCRClaim : [true]

TraderBCRClaimPollingTimeout : [30000]

————————————————————

④

⑤



5. To get the scanning data one by one;

1) Scan a barcode with BCR, 2) Click “Get Data”

The scanned data is shown in “Barcode data” and some messages are shown in “Response”

e.g.

<Barcode Data> ————————————————————

4901085002605

————————————————————

<Response> ————————————————————

- onReceive -

TraderBCRSuccess : [true]

TraderBCRCode : [0]

TraderBCRClaim : [true]

TraderBCRData : [NDkwMTA4NTAwMjYwNQ==]

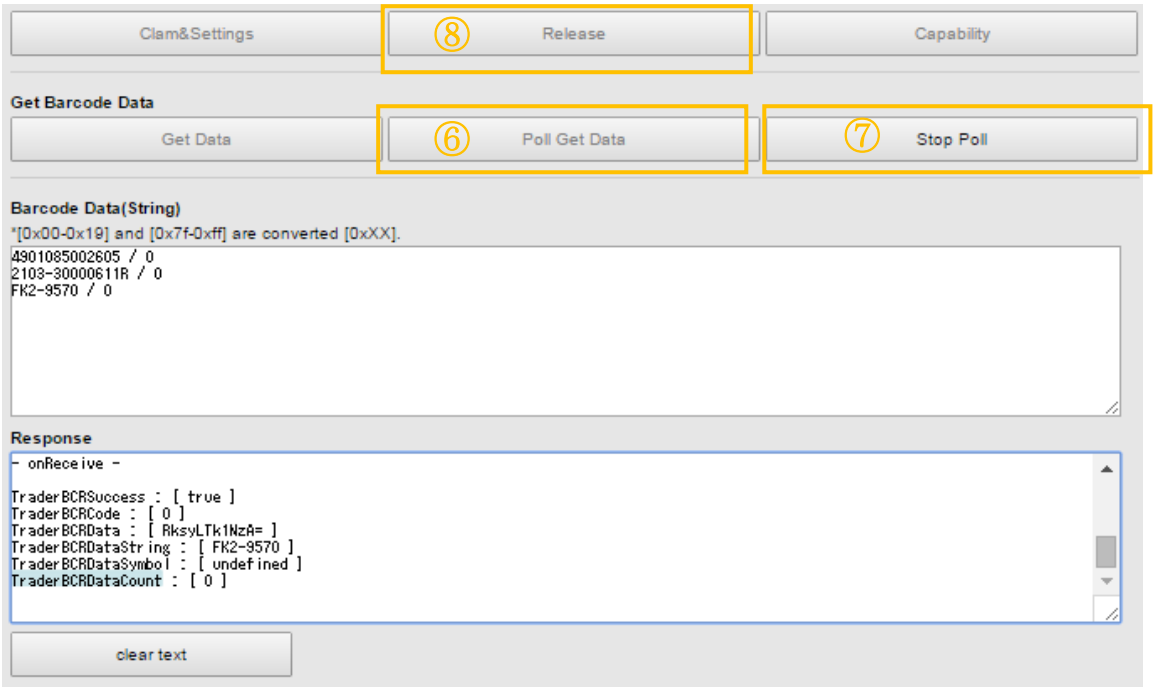
TraderBCRDataString : [4901085002605]

TraderBCRDataCount : [1]

————————————————————

6. To get the scanning data consecutively;
   1) Click “Poll Get Data”, 2) Scan some barcodes with BCR
   The scanned data is shown in “Barcode data” and some messages are shown in “Response”

7. To stop scanning mode, click “Stop Poll”
8. To finish barcode control, click “Release”

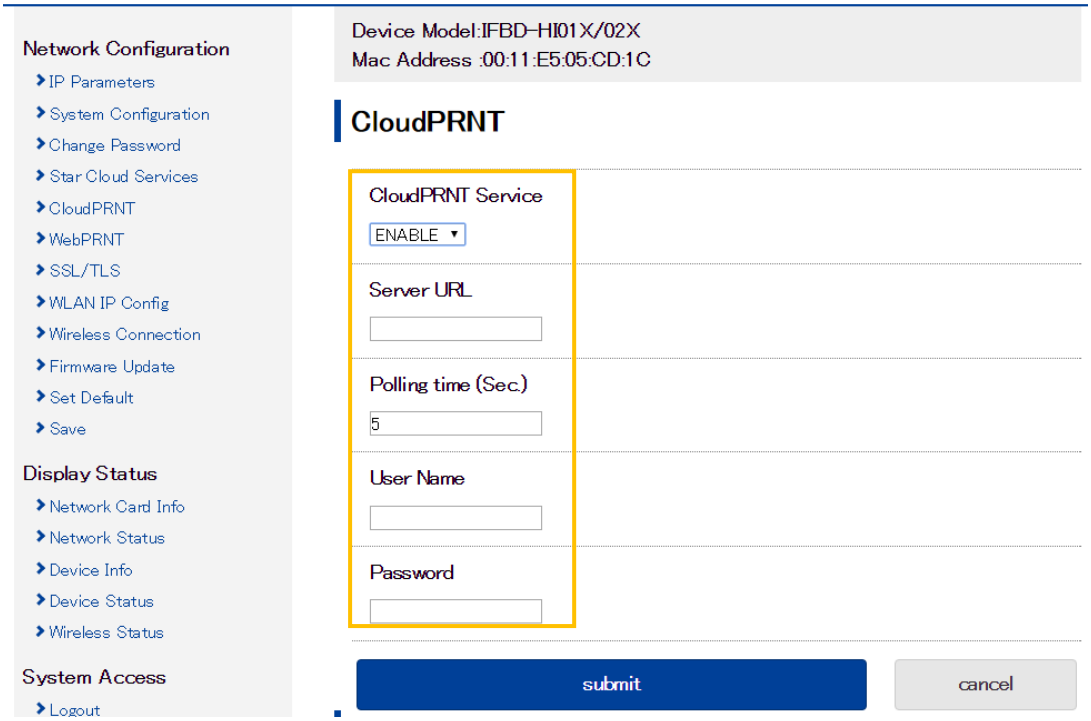


Fin

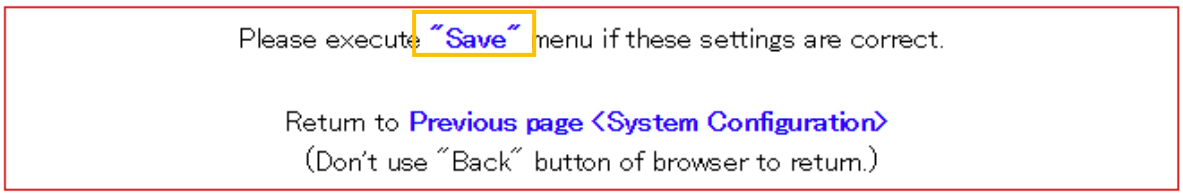
6. CloudPRNT

■How to set CloudPRNT in HI01X/02X

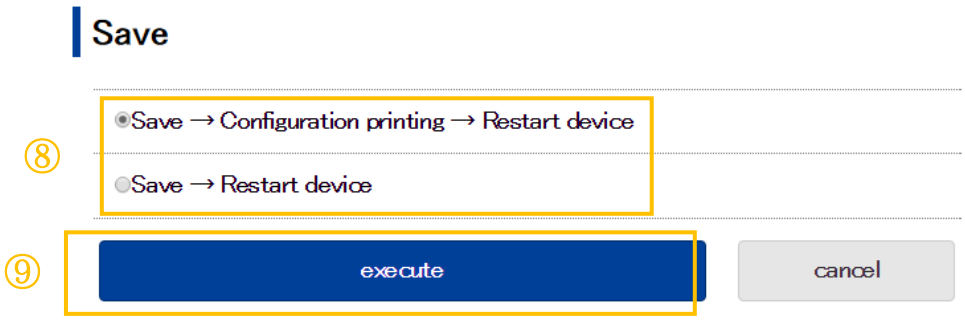
1. Select [CloudPRNT] menu of WebUI.
2. Select “ENABLE”. (Factory setting is DISABLE)
3. Put server URL (A demo server is available from Star. Please contact to your nearest Star Micronics.)
4. Set polling time e.g. [5] seconds
5. Set User Name and Password if the server request. (If required)
6. Click “Submit” button.



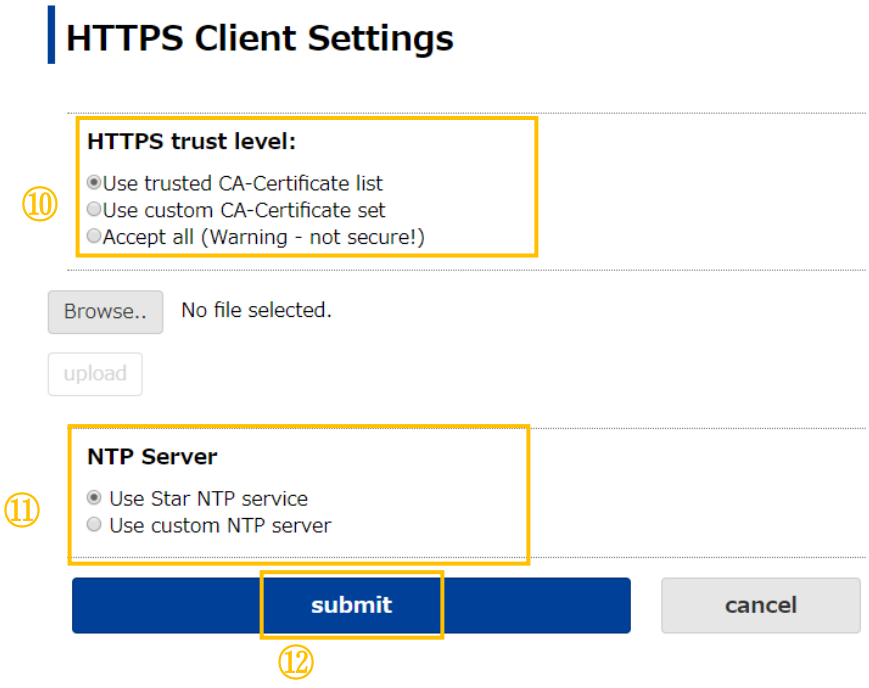
7. Select “Save”



8. Select “Save -> Configuration printing -> Restart device” or “Save -> Restart device”
9. Click “execute” button. Then printer executes reboot and setting is finished.



10. To use secure HTTPS communication to server, please set CA-certification to follow server specification.
    0: Use Bundle of CA Root Certificates(Mozilla as of: Thu Jun 18 14:06:27 2015)
    1: Use custom CA certificate. (Registered by Web UI on CloudPRNT setting)
    2: Accept all (Warning - not secure)
11. Select NTP server to obtain the calendar and precious time information.
    Default setting is using Star NTP server. If you prefer to use other NTP server, select “Use custom NTP server” and input your NTP server URL.
12. Click “Submit” button, and execute “save” by following 7. 8. 9.



Fin

* For server side preparation, Star Micronics provides a server developing document. Please contact your nearest Star Micronics.

■How to set Peripheral Device for CloudPRNT in HI01X/02X

From I/F firmware ver. 1.4, you can control to peripheral device via CloudPRNT

* For supported peripheral devices, please contact your nearest Star Micronics.

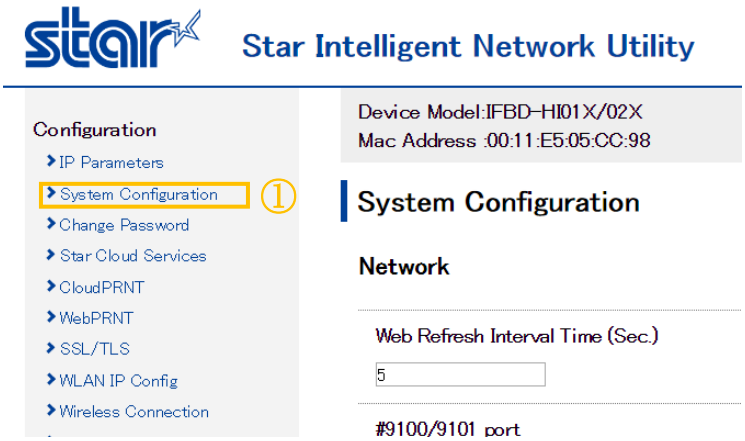
[Star SCD222U / Scale]

Please connect to USB A port on HI01X02X interface and power on a printer, HI01X02X firmware will detect automatically if there is a supported device. (Firmware Version 1.4 or later)

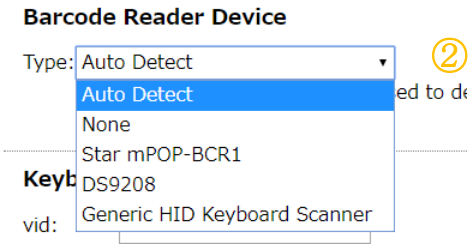
[mPOP-BCR1 / 2D Scanner]

Visit the web configuration utility.

1. Select [System Configuration] menu



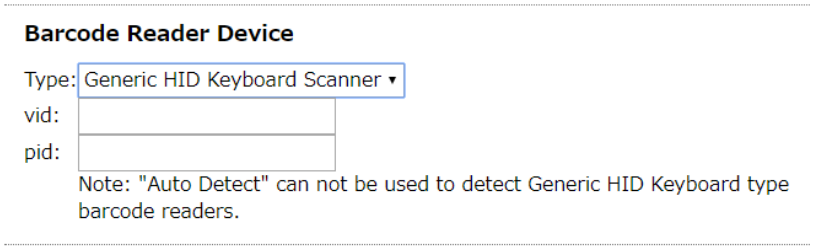
4. Select “Auto Detect” in [Barcode Reader Device]. (Firmware Version 1.4 or later)



* For other HID BCR, “Auto Detect” can’t be used to detect Generic HID Keyboard Scanner. So please select [Generic HID Keyboard Scanner] and put VID and PID of Barcode Reader Device. In this case, “a” to “f” must be input as lower case.

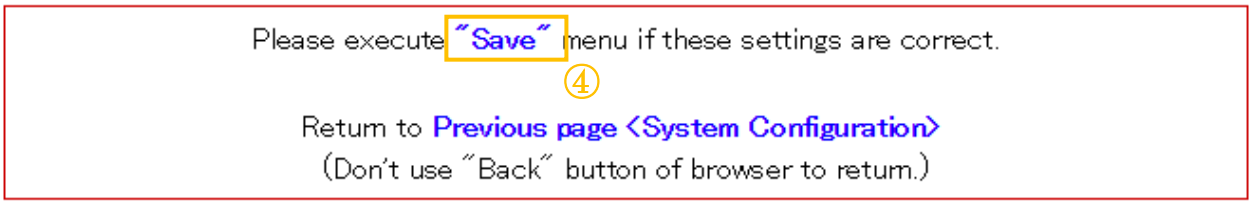
You can check the BCR of VID and PID by Windows “Device manager”

(Windows button > Computer > Manage (right click)



5. Click “Submit” button on the bottom of web page..

6. The following message is shown. Select “Save”.



7 Select “Save-> Configuration printing -> Restart device”

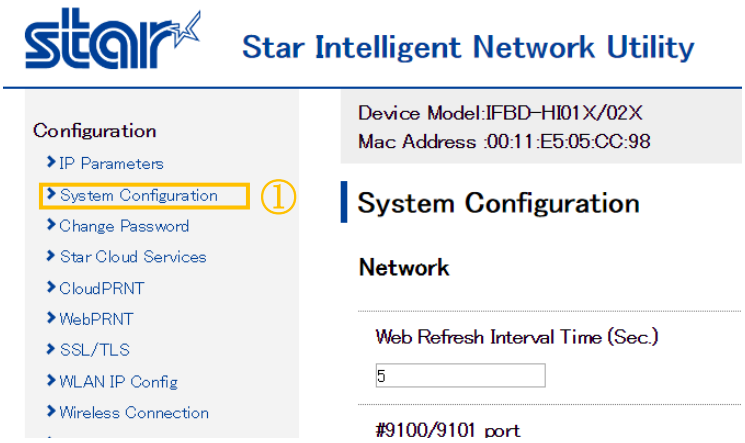
8 Click “execute” button. Then printer executes reboot and setting is finished.

Fin

[HID Keyboard Device]

Visit the web configuration utility.

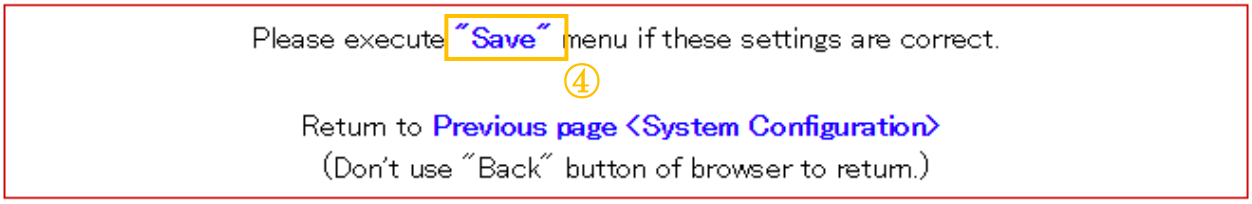
1. Select [System Configuration] menu



2. Select “vid:” and “pid:” in [Keyboard Device] and put VID and PID of HID Keyboard Device. In this case, “a” to “f” must be input as lower case. (Firmware Version 1.4 or later)

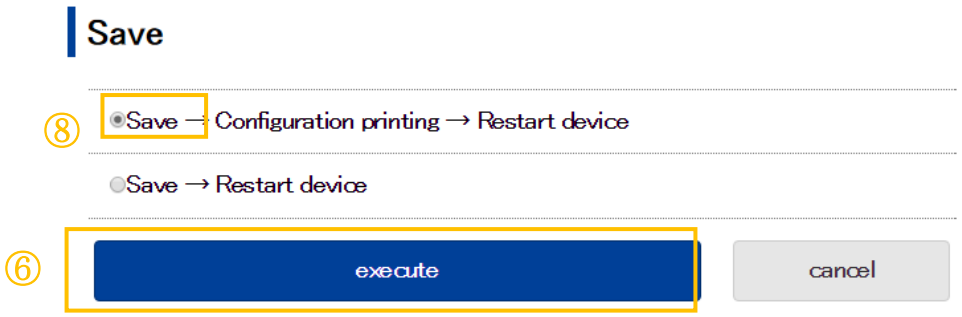
3. Click “Submit” button on the bottom of web page.

4. The following message is shown. Select “Save”.



9 Select “Save-> Configuration printing -> Restart device”

10 Click “execute” button. Then printer executes reboot and setting is finished.


Save
⑧
Save → Configuration printing → Restart device
Save → Restart device
⑥
execute
cancel

Fin

7. Star Cloud Services

HI01X/02X supports AllReciepts and do not need to install the driver supporting SCS.
It can be set by using Web Configuration Utility of HI01X/02X instead.
Raster data, Text data and Micro Receipt are supported from IFBD-HI01X V1.3.0 (Sep, 2017)

[Note]
Please do not use the driver supporting SCS together with HI01X/02X SCS function at the same time. If do this, multiple QR code will be added to the receipts.

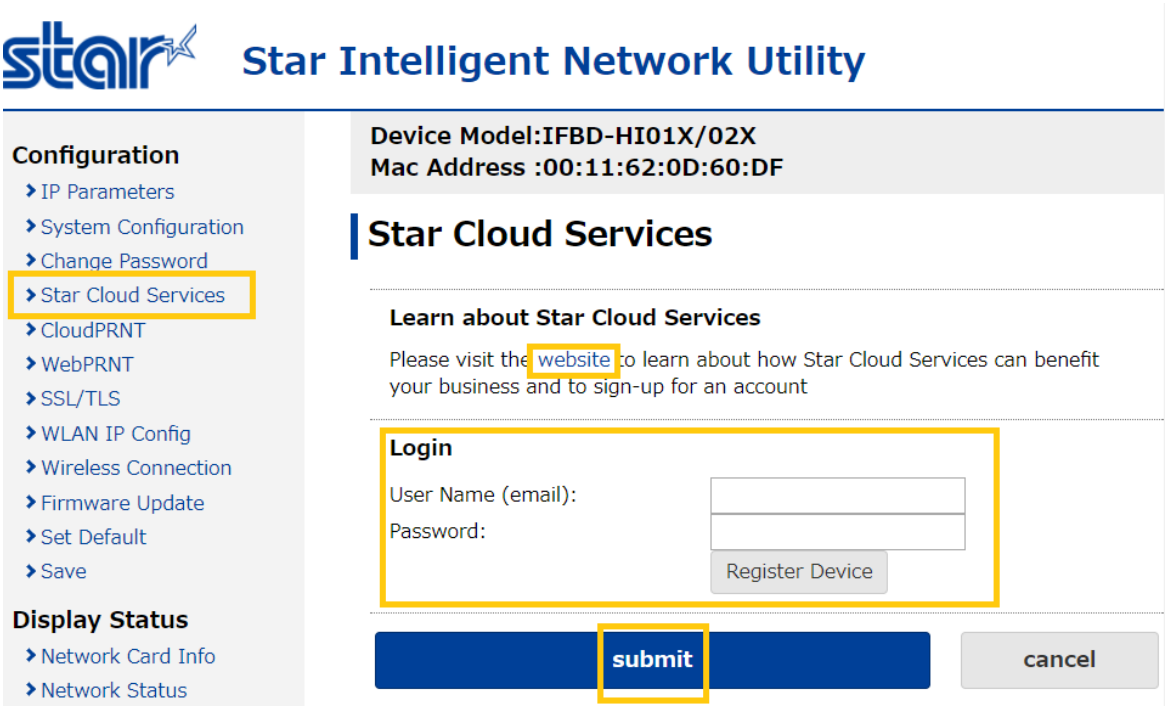
IFBD-HI01X/02X is supporting the following printing solution for All Receipts.
- Star Line Thermal Printer are supported
- Star Dot Matrix Printer does not be supported.

I/F Board Model	Printer Model	Interface Firmware Version	Supported Printer Driver / SDK
IFBD-HI01X	TSP650II TSP700II TSP800II	1.2	・Android StarIO SDK V3.X (Raster data) ・iOS StarIO SDK V3.X (Raster data) ・StarPRNT Intelligence Printer Driver (Raster data) ・Linux / Mac OS X CUPS Driver ・CloudPRNT (Raster data)
		1.3 or later	・Android StarIO SDK V3.X ・iOS StarIO SDK V3.X ・StarPRNT Android SDK V5.X ・StarPRNT iOS SDK V5.X ・StarPRNT WindowsStoreApps SDK V5.X ・StarPRNT Intelligence Printer Driver ・Linux / Mac OS X CUPS Driver ・OPOS Driver ・JavaPOS Driver ・CloudPRNT ・WebPRNT
IFBD-HI02X	SP700	No Support	No Support

(As of September 2017)

■How to set Star Cloud Services in HI01X

1. Select [Star Cloud Services] menu of WebUI.
   If it has already registered device to SCS on HI01X, then please go to “3.“.
2. Input “User Name” and “Password” for SCS account(*) at [Login], and push “Register Device” to register the HI01X to SCS server. If it just uses default setting, then can be going to “7.”
   (*) If do not have an account, then please push “website” link at [Learn about Star Cloud Services] to create SCS account.

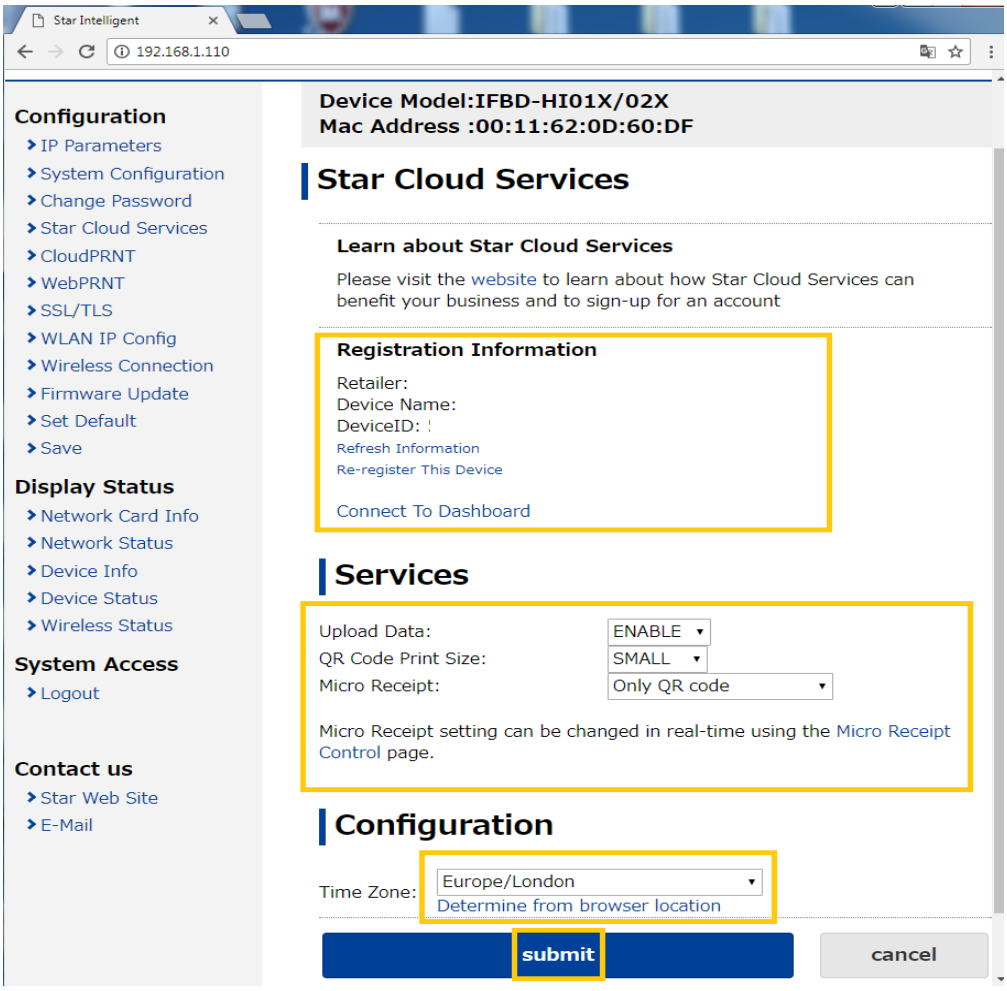


3. It can check registered information after registering device at [Registration Information].
4. On “Services”, it can set following items.((*)Default)

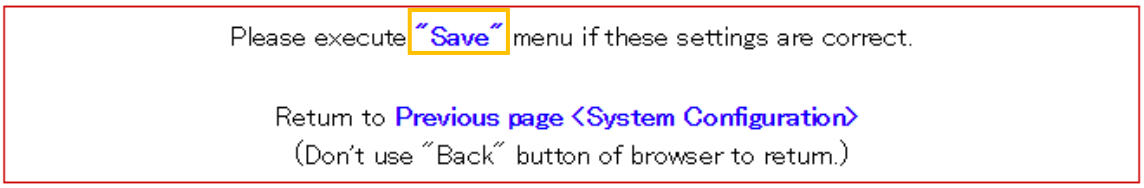
Item	Value	Description
Upload Data	ENABLE(*) / DISABLE	To enable All Receipts function on HI01X
QR Code Print Size	SMALL / MEDIUM(*) / LARGE	To select printing QR code size.
Micro Receipt	DISABLE: Full Receipt(*) / Information + QR code / Only QR code	To set enable/disable and select printing receipt style with All Receipts function as “Print Content + CTA Logo + QR code” or “CTA Logo + QR code”, “QR code”.

5. On “Configuration”, it can set local time zone by selecting area manually or push “Determine from browser location”(*).
   (*)It has to set “SSL/TLS” (Reference: “2. Web configuration utility”) on IFBD-HI01X and access the UI by https because web browser requires the secure access to get a location information.

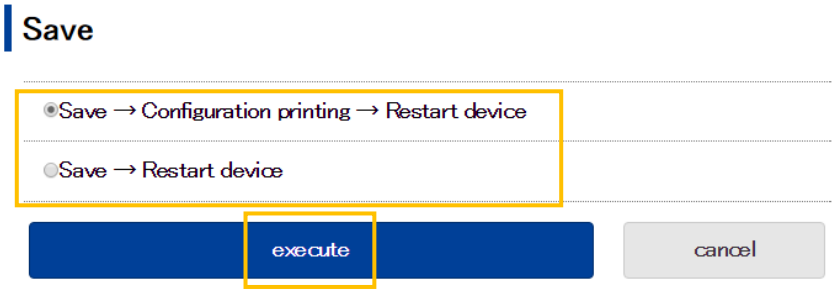
6. Click “submit” button.



7. Select “Save”.



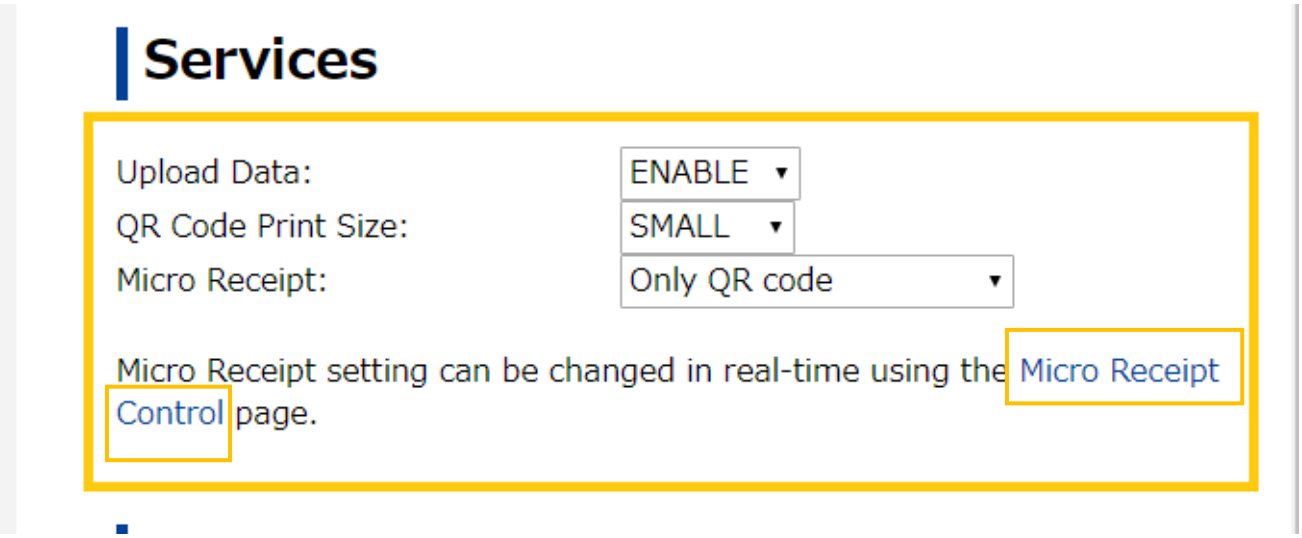
8. Select “Save -> Configuration printing -> Restart device” or “Save -> Restart device”. Click “execute” button. Then printer executes reboot and setting is finished.(Fin.)



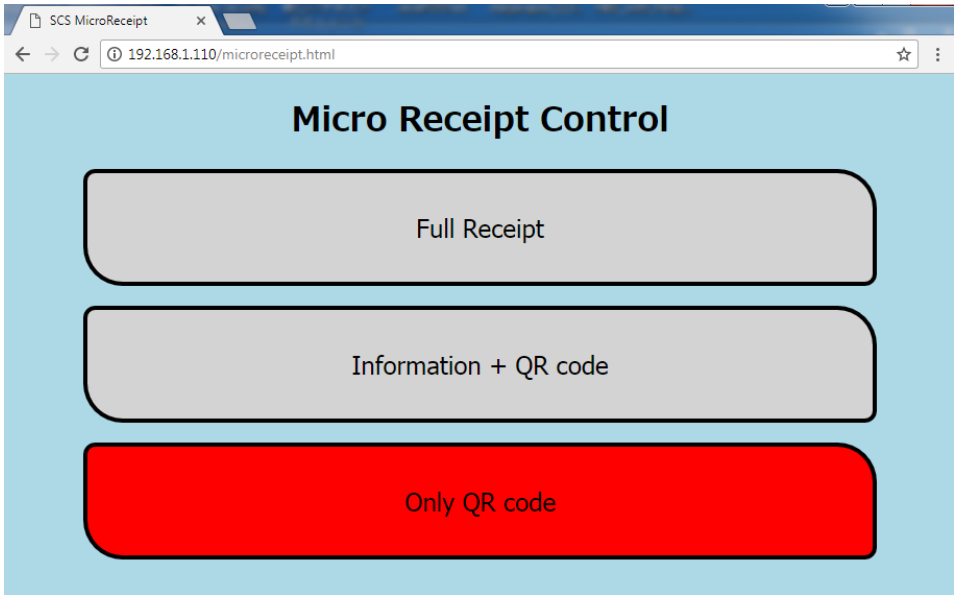
■How to use “On demand” function for Micro Receipt

“On demand” fuction can change the style of Micro Receipt in real time by web browser.
Therefore an operator easily can use different Micro Receipt setting on each printed receipt.

1. Click a link on the “Star Cloud Services -> Services-> Micro Receipt” of Web Config UI.
   Or please input the URL which is http://<Printer IP Address>/microreceipt.html on web browser.



2. Select style of Micro Receipt. The red color button is showed a current selected style. (Fin)
   These item description are same as step “4.” in “How to set Star Cloud Services in HI01X”.



History

Rev 1.0	29th September 2016	Official Release
Rev 1.1	13th January 2017	Applicable printer models added BCR setting Changed
Rev 1.2	27th September 2017	Added 3 supported WiFi adapters Added Notes about changing setting of printer at “Instruction” Added SSL/TLS setting description at “Web configuration utility” Added CloudPRNT setting and Disconnect Message at “Setting by USB memory” Added the description of All Receipts and Micro receipt settings
Rev 1.3	9th March 2018	Added Peripheral Device setting for CloudPRNT function

Star Micronics is a global leader in the manufacturing of small printers. We apply over 50 years of knowhow and innovation to provide elite printing solutions that are rich in stellar reliability and industry-respected features. Offering a diverse line of Thermal, Hybrid, Mobile, Kiosk and Impact Dot Matrix printers, we are obsessed with exceeding the demands of our valued customers every day.

We have a long history of implementations into Retail, Point of Sale, Hospitality, Restaurants and Kitchens, Kiosks and Digital Signage, Gaming and Lottery, ATMs, Ticketing, Labeling, Salons and Spas, Banking and Credit Unions, Medical, Law Enforcement, Payment Processing, and more!

High Quality POS Receipts, Interactive Coupons with Triggers, Logo Printing for Branding, Advanced Drivers for Windows, Mac and Linux, Complete SDK Packages, Android, iOS, Blackberry Printing Support, OPOS, JavaPOS, POS for .NET, Eco-Friendly Paper and Power Savings with Reporting Utility, ENERGY STAR, MSR Reading, *future*PRNT, StarPRNT… How can Star help you fulfill the needs of your application?

Don't just settle on hardware that won't work as hard as you do. Demand everything from your printer. Demand a Star!

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