# Set-up Manual for IFBD-HI01X/02X

Wireless LAN Printer Star webPRNT CloudPRNT

STAR MICRONICS CO., LTD.



Rev2.0

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

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## 1. Introduction

Interface	Printer	Printer F	irmware	
Board model	model	Boot Version	Main Version	Interface Firmware
	TSP650II	1.0 or later	1.0 or later	1.1 or later
IFBD-HI01X	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
	TSP650IISK	1.0 or later	1.0 or later	1.9 or later
IFBD-HI02X	SP700	2.0 or later	3.0 or later	1.2 or later

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

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-HIX interface can be Star webPRNT Printer(HI01X) and CloudPRNT Printer(HI01X/02X).

#### [Notes]

When changes the printer setting (e.g. Memory Switch Settings, Register Logo Setting, Printer F/W  $\cdot$  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.

After updating an HI01/02X firmware to latest version and printer is rebooted, if web config ui does not show/work correctly, please reboot a web browser and access the web config ui page again to show the web page correctly.

Driver	S	StarPRNT Intelliger	nce	CUPS Driver (Web Release)	JavaPOS Driver (Web Release)
Version	Printer Driver Ver. 2.0	OPOS Ver1.13.2	StarlO Ver1.2.2	Linux: Ver3.1.1 Mac: Ver3.1.1	Ver1.9.13 or later
	or later	or later	or later	or later	
Support	O*3 *5	O*1 *6	O *5	O *2 *4 *6	O *6

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

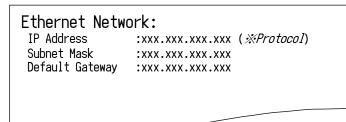
\*1 : OPOS driver with USB is supported from HI01X/02X firmware version 1.2.

- \*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 Micronics Cloud, the "Fixed Length" of "Page Type" can not use correctly. The printing result becomes same as "Variable Length" of "Page Type".
- \*5 : TSP650IISK is supported PSA Ver 3.7 or later and StarIO Ver 5.14.0 or later.
- \*6 : TSP650IISK does not support CUPS / JavaPOS / OPOS driver.

## 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.



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To enter the setting of HI01X/02X page, click "Login" and put user name and password.
 User name: "root", Password: "public" as factory setting. (These has been indicated under "Login")



3. After Login, if login password for root is default, then "Change Password" contents show.

Please input new password and click submit.

If submit is succeeded, will show other items of "Configuration". so please follow next "Example:" for setting other item or "4." to save setting.

Star Sta	r Intelligent Network Utility
Configuration  Change Password	Device Model:IFBD-HI01X/02X MAC Address :00:11:62:0D:60:F8
Change default password to configure network settings.	Change Password
Display Status	For "root" account, Web.
Network Card Info	
Network Status	Input old password
Device Info	•••••
Device Status	
<ul> <li>Wireless Status</li> </ul>	Input new password
System Access	Show characters
> Logout	
	Input new password (re-input)
Contact us	Ghow characters
Star Web Site	
> E-Mail	submit



Example : changing LPR setting from Disable to Enable

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

star	Star Intelligent Network Utility
Configuration	Device Model:IFBD-HI01X/02X Mac Address :00:11:E5:05:CC:98
<ul> <li>System Configuration</li> <li>Change Password</li> </ul>	System Configuration
<ul> <li>Star Cloud Services</li> <li>CloudPRNT</li> </ul>	Network
> WebPRNT > SSL/TLS > WLAN IP Config	Web Refresh Interval Time (Sec.) 5
<ul> <li>&gt; Wireless Connection</li> <li>&gt; Firmware Update</li> <li>&gt; Set Default</li> </ul>	#9100/9101 port
▶ Save Display Status	#9100 Multi Session
<ul> <li>Network Card Info</li> <li>Network Status</li> <li>Device Info</li> </ul>	#9100 Data Timeout (Sec.)
<ul><li>Device Status</li><li>Wireless Status</li></ul>	
System Access Logout	DISABLE ENABLE DISABLE Alive

Then, click Submit in the bottom of this screen.

submit		cancel

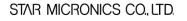
4. Click the menu [Save].

Select any of the following, the click Execute:

 $\textbf{\cdot}\mathsf{Save}\,\rightarrow\,\mathsf{Configuration}\,\,\mathsf{Printing}\,\rightarrow\,\mathsf{Restart}\,\mathsf{device}$ 

 $\textbf{\cdot}\mathsf{Save}\, \rightarrow\, \mathsf{Restart} \; \mathsf{device}$ 

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





Star Sta	r Intelligent Network Utility
Network Configuration	Device ModeLIFBD-HI01 X/02X
> IP Parameters	Mac Address :0011:E5:05:CD1C
<ul> <li>System Configuration</li> </ul>	Mad Address 100.11.E3.00.010.10
Change Password	
CloudP RNT	Save
> WebPRNT	
> SSL/TLS	•Save $\rightarrow$ Configuration printing $\rightarrow$ Restart device
> WLAN IP Config	
> Wireless connection	Save → Restart device
> Firmware Update	
> Set Default	execute cancel
> Save	

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".

Star sta	r Intelligent Network Utility
Configuration	Device Model:IFBD-HI01X/02X Mac Address :00:11:62:0D:60:DF
<ul> <li>System Configuration</li> <li>Change Password</li> </ul>	SSL/TLS
<ul> <li>Star Cloud Services</li> <li>CloudPRNT</li> <li>WebPRNT</li> </ul>	SSL/TLS Setting
<ul> <li>&gt; SSL/TLS</li> <li>&gt; WLAN IP Config</li> <li>&gt; Wireless Connection</li> </ul>	Create Self-Signed Certificate
<ul> <li>&gt; Wireless Connection</li> <li>&gt; Firmware Update</li> <li>&gt; Set Default</li> <li>&gt; Save</li> </ul>	Import CA-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,	(Blank)
		Nanatshushinya	
Organization Name (eg, company)	128	Star Micronics Co., Itd.	(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	2020/12/31	(Blank)
	2049.12.31		



Configuration	Device Model:IFBD-HI01X/02X Mac Address :00:11:62:0D:60:DF	
<ul> <li>System Configuration</li> </ul>	Self-Signed Certificate	
Change Password	Sen-Signed Certificate	
Star Cloud Services		
CloudPRNT	Country Name (2 letter code)	
> WebPRNT		
> SSL/TLS		
WLAN IP Config	State or Province Name	
Wireless Connection		
Firmware Update		
> Set Default	Locally Name (eg, city)	
> Save		
Display Status		
Network Card Info	Organization Name (eg, company)	
Network Status		
> Device Info		
Device Status	Organization Unit Name (eg, section)	
> Wireless Status		
System Access	Domain	
> Logout		
	Expiration Date (eg, YYYY/MM/DD)	
Contact us		
Star Web Site		

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

<b>star</b> s	tar Intelligent Network Utility
Network Configuration	Device ModeLIFBD-HI01 X/02X
> IP Parameters	Mac Address :0011:E5:05:CD1C
<ul> <li>System Configuration</li> </ul>	Niac Aduress 100.11.E3.00.010.10
Change Password	
CloudP RNT	Save
> WebPRNT	
> SSL/TLS	•Save $\rightarrow$ Configuration printing $\rightarrow$ Restart device
> WLAN IP Config	
> Wireless connection	Save → Restart device
> Firmware Update	
> Set Default	execute cancel
> Save	

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.

Contact us Star Web Site				
> E-Mail	create	download	delete	

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5. Select "SSL/TLS" and push "SSL/TLS Setting".

Star Intelligent Network Utility			
Configuration	Device Model:IFBD-HI01X/02X Mac Address :00:11:62:0D:60:DF		
<ul> <li>System Configuration</li> <li>Change Password</li> </ul>	SSL/TLS		
<ul> <li>&gt; Star Cloud Services</li> <li>&gt; CloudPRNT</li> <li>&gt; WebPRNT</li> </ul>	SSL/TLS Setting		
<ul> <li>&gt; SSL/TLS</li> <li>&gt; WLAN IP Config</li> <li>&gt; Wireless Connection</li> </ul>	Create Self-Signed Certificate		
<ul> <li>&gt; Firmware Update</li> <li>&gt; Set Default</li> <li>&gt; Save</li> </ul>	Import CA-Signed Certificate		

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 $\sim$ 65535	443
Certificate	Self_Signed/CA-Signed	Self_Signed

Configuration	Device Model:IF Mac Address :0	-BD-HI01X/	02X	
<ul> <li>IP Parameters</li> <li>System Configuration</li> <li>Change Password</li> </ul>	SSL/TLS S	etting		
<ul> <li>Star Cloud Services</li> <li>CloudPRNT</li> </ul>	SSL/TLS			
> WebPRNT	ENABLE •			
> SSL/TLS				
WLAN IP Config	TCP Port			
Wireless Connection	443			
Firmware Update				
> Set Default	Certificate			
> Save	Self_Signed ▼			
Display Status				
Network Card Info		subr	nit	cancel
> Network Status				

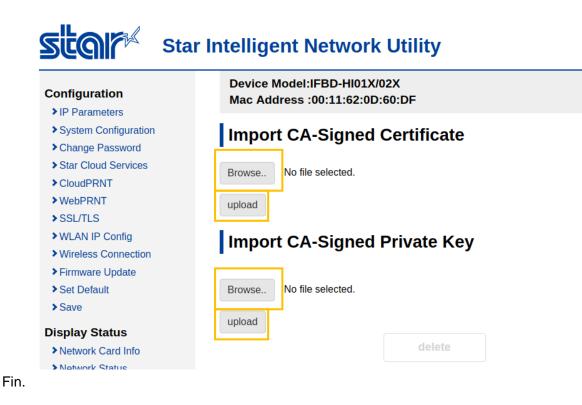
7. Push "Save" link. At below page, select save way and push "execute" (Same as "3."). It can access to <u>https://[Printer IP Address]</u> after reboot.

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".







## 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 Micronics Cloud. The other is offline updating from a local file.

#### (From V1.5.0 (Sep, 2018)):

IFBD-HI01X/02X is supported to the firmware update function with USB Memory. It can be useful for offline situation without ethernet cable and Wireless LAN dongle.

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

star	Star Intelligent Network Utility
Configuration	Device Model:IFBD-HI01X/02X Mac Address :00:11:E5:05:CC:98
<ul> <li>System Configuration</li> <li>Change Password</li> </ul>	Network Card Infomation
<ul> <li>Star Cloud Services</li> <li>CloudPRNT</li> <li>WebPRNT</li> </ul>	Part Name: IFBD-HI01X/02X
<ul> <li>SSL/TLS</li> <li>WLAN IP Config</li> <li>Wireless Connection</li> </ul>	<b>Main F/W:</b> V1.1.0
<ul><li>Firmware Update</li><li>Set Default</li></ul>	Boot F/W:

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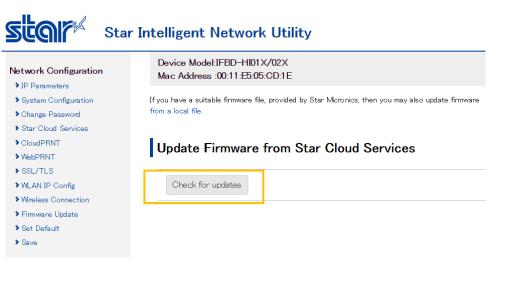
A. Updating from Star Micronics Cloud (Online)

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.

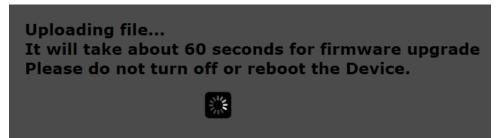
#### A firmware update is available

VersionXXX is available for your hardware.

HI01/02x Application Version: trunk-r : hi0102	firmware release notes xx Numeric Package Version: Main Firmware: uImage_xx. bin Hardware Model:
http://www.star-m.co.jp	

Download

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.

Update Firmware from Star Cloud Services

Check for updates Your Interface hardware is up-to-date

No firmware updates are needed for your hardware at this time.

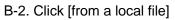
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#### B. Updating from a local file (Offline)

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

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







- > SSL/TLS
- > WLAN IP Config
- > Wireless Connection
- > Firmware Update
- > Set Default
- > Save

Check for updates

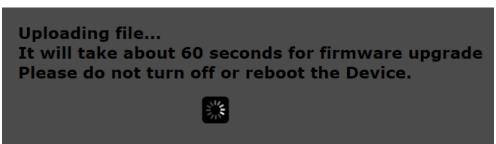


B-3 . Click [Browse] button, and select a firmware file.



#### 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.



C. Updating from USB memory stick (Offline) - From V1.5.0 (Sep, 2018) For this procedure user must obtain a F/W file from Star Micronics in advance.

This product allows updating a firmware by generic USB memory that stores a specified setting file.

C-1. An operator connects USB memory (FAT32 formatted) which has "star-hix.conf" file and "HIXUPDATE.bin" file to this product with printer power OFF status.

For the details of these file, see the bottom of this section.

C-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 and "HIXUPDATE.bin" file name is correct, then below printing is conducted.

*************************	****
USB CONFIGURATION	
& FIRMWARE UPDATE	
*****	****
To start configuration,	
please open printer cover	for
more than 1 sec.	
and then close within 1mir	า.

If star-hix.conf file parameter or the firmware file name/content is incorrect, the error messages will be printed after performing printer cover open and close mentioned in C-3. Then the update mode will be canceled(\*).

(\*) if star-hix.conf file does not exist but HIXUPDATE.bin exists in USB memory, Firmware update process will proceed.

C-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.



C-4. Printer starts verifying the "HIXUPDATE.bin". When the verification is finished correctly, below printing is conducted.



USB memory can be taken out after this printing.

C-5. Printer reboots automatically. Then firmware is updated.

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.

• Firmware file specification

File name : HIXUPDATE.bin or HIXUPDATE\_XXX....bin(XXX is md5 hash value) (fixed)

File path : root directory of USB memory (fixed)

File format : firmware file, user must obtain a F/W file from Star Micronics in advance.

Category	Field Name	Value and details
Firmware	allow_firmware_update	Set to TRUE or FALSE to set whether firmware update will be allowed or not.
update		If firmware package file is in USB stick,
		Firmware update process will be performed.
		Firmware package checksum value (md5). If supplied, checksum of the
		firmware package will be checked.
	firmware_checksum	If firmware package file name is with checksum value
		(HIXUPDATE_XXXXXX.bin(XXXXXX is md5 checksum value)),
		the checksum value in the file name will be used to compare with this value.
		If it does not match, firmware update will be denied.
		Set to TRUE or FALSE to set whether Main firmware update will be allowed
	allow_main_firmware_update	or not.
	_111ii	Set to TRUE or FALSE to set whether application firmware file update will be
	allow_application_firmware_update	allowed or not.

#### "star-hix.conf" example :

#Firmware update settings

allow\_firmware\_update: TRUE

 $firmware\_checksum:\ 650d59efd35023dbb2dca995f16c3682$ 

allow\_main\_firmware\_update: TRUE

 $allow\_application\_firmware\_update:\ TRUE$ 

#### (# columns are ignored)

#### [Notes]

This firmware update function can be use with USB configuration at same time as below.



"star-hix.conf" example for "configuration" and "firmware update" :

#Firmware update settings

allow\_firmware\_update: TRUE

firmware\_checksum: 650d59efd35023dbb2dca995f16c3682

allow\_main\_firmware\_update: TRUE

allow\_application\_firmware\_update: TRUE

#WifiSettings

ssid: 000A79C03D79

security: WPA2-PSK

encryption: AES

key: 71428246 wifi\_ip: DHCP

About other "configuration" settings,

please refer to "4. WLAN dongle setting" -> "B Setting by USB memory".

Fin.



## 4. WLAN dongle setting

WLAN chipset	Brand	Model	Vendor ID:Product ID	Test result	
	PLANEX	GW-USNANO2A	2019:ab2a	~	
	TRENDnet	TEW-648UBM V1.1R	20f4:648b	~	
RTL8188CUS	EDIMAX	EW-7811UN V1.0A	7392:7811	~	
	NETGEAR	WNA1000M	0846:9041	~	
	PLANEX	GW-900D	2019:ab30	✓ *1	
	Buffalo	WI-U2-433DM	0411:0242	~	
	TRENDnet	TEW-805UB	20f4:805b	<b>∨</b> *1	
	INCINDITE	HW:V1.0R	2014.0030	V 1	
RTL8812AU	TP-LINK	Archer T4U Ver.1	2357:0101	✓ *1	
KTL881ZAU	TP-LINK	Archer T4U Ver.2	2357:010d	✓ *1 *2	
	D-Link	DWA-182	2001:3315	✔ *1	
		H/W:C1, F/W:3.06	2001.3313	▼ ↑1	
	LINKSYS	WUSB6300	13b1:003f	✓ *1	
RTL8192DU	Aus Linx	AL-9904R3	0bda:8194	~	
KILOI92DU					
	EDIMAX	EW-7822ULC V1.0A	7392:b822	<b>√</b> *3	
RTL8822BU	TP-LINK	Archer T4U Ver.3	2357:0115	✓ *1 *3	

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

\*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.

\*3 Interface F/W version 1.6 or later is required to be supported.

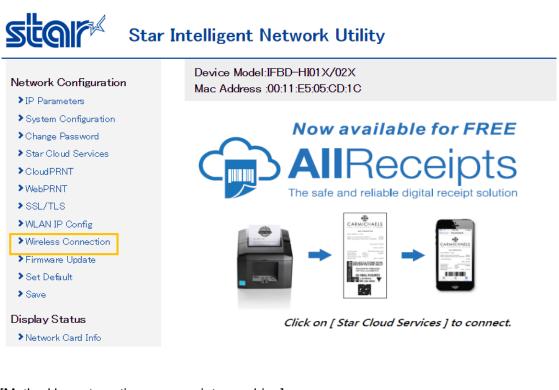
## **How to set WLAN IP configuration by using WLAN dongle.**

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.

Wireless Connec	tion
Site Survey	
Manual Connect	
Enter	





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

SSID	Select	Encryption
AirPortN	Select	WPA/WPA2-TKIP/AES
TSP100II-B93271	Select	OPEN
WARPSTAR-782F6D	Select	WPA/WPA2-AES
aterm-06c15f-g	Select	WPA/WPA2-AES
WARPSTAR-782F6D-W	Select	WEP
StarDemoAP	Select	WPA2-AES
BAT_Aterm	Select	WPA/WPA2-AES
Roming	Select	WPA/WPA2-TKIP/AES
000A79C03D79	Select	WPA/WPA2-TKIP/AES
Buffalo-G-D468	Select	WPA2-AES

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

Connect Sett	ings		
SSID			
AirPortN			
Key			
	]		
	connect		cancel
		•	



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.

Network Configuration	Device Model:IFBD-HI01X/02X Maic Address :00:11:E5:05:CD:1E		
<ul> <li>System Configuration</li> <li>Change Password</li> </ul>	Wireless configuration is accepted.		
<ul> <li>Star Cloud Services</li> <li>CloudPRNT</li> <li>WebPRNT</li> <li>SSL/TLS</li> </ul>	SSID : AirPortN		
<ul> <li>&gt; WLAN IP Config</li> <li>&gt; Wireless Connection</li> <li>&gt; Firmware Update</li> </ul>	Security : WPA/WPA2-TKIP/AES		
<ul> <li>Set Default</li> <li>Save</li> <li>Display Status</li> <li>Network Card Info</li> </ul>	Please exe <mark>cute <b>"Save"</b> me</mark> hu if these settings are correct. Return to <b>Previous page <wlan config="" ip=""></wlan></b> (Don't use "Back" button of browser to return.)		

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.

Save		
●Save → Configur		
©Save → Restart o	levice	
	execute	cancel



#### Method by inputting the setting manually

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

Wireless	Connection
Site Surve	y
Enter	
Manual Co	nnect
Enter	

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

SSID		
AirPortN		
Security		
WPA2-PSK V		
KeyFormat		
Passphrase (8~63 c	hars) 🔻	
Passphrase (8 <sup>°</sup> 63 c Encryption	hars) ▼	 
	hars) ▼	 
Encryption	hars) ▼	
Encryption AES •	hars) •	



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.

Star Intelligent Network Utility			
Network Configuration	Device Model:IFBD-HI01X/02X Mac Address :00:11:E5:05:CD:1C		
<ul> <li>System Configuration</li> <li>Change Password</li> </ul>	Wireless configuration is accepted.		
> Star Cloud Services > CloudPRNT > WebPRNT	SSID :		
> SSL/TLS > WLAN IP Config	AirPortN Security :		
<ul> <li>&gt; Wireless Connection</li> <li>&gt; Firmware Update</li> </ul>	WPA2-PSK		
> Set Default > Save	Encryption : AES		
Display Status			
Network Card Info	Please execu <mark>re <b>"Save"</b> n</mark> enu if these settings are correct.		
Network Status			
<ul> <li>Device Info</li> <li>Device Status</li> </ul>	Return to <b>Previous page 〈WLAN IP Config〉</b> (Don't use ˝Back˝ button of browser to return.)		

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.

Save		
●Save → Configura		
©Save → Restart d		
	execute	cancel



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

Network Configuration	Device Model:IFBD-HI01X/02X Mac Address :00:11:E5:05:CD:1E
<ul> <li>System Configuration</li> <li>Change Password</li> </ul>	Wireless Status
<ul> <li>Star Cloud Services</li> <li>CloudPRNT</li> <li>WebPRNT</li> </ul>	Status: Connected
<ul> <li>SSL/TLS</li> <li>WLAN IP Config</li> <li>Wireless Connection</li> </ul>	SSID: AirPortN
<ul> <li>Firmware Update</li> <li>Set Default</li> <li>Save</li> </ul>	Current IP 192.168.0.7 (DHCP)
Display Status	

Network Card Info

Network Status

> Device Info

> Device Status

> Wireless Status



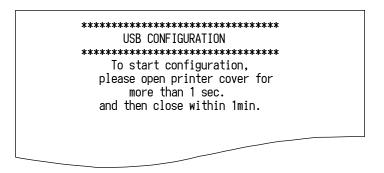
#### B Setting by USB memory

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.

Applying settings
Changing Configuration Settings : ssid : XXXXXXXX
Usbconfig : ENABLE
Updating Now
Please wait, your printer will automatically Restart when the update is complete. This operation will take approximately 1min. You can disconnect USB device now

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	auth	An SHA256 hash of the root password. If supplied then this must match the printer
(with SHA256)		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. (*)

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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	rootpassword	Set a new 'root' user password for accessing the configuration UI.
setting(*)		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	usbconfig	Set to ENABLE or DISABLE to control the USB configuration function. If set to
setting function		DISABLE, then USB configuration will be blocked after settings are applied. To
valid/invalid		re-enable, a user will have to log-in to the WEB configuration UI and manually
		enable the ""USB Configuration"" option.
CloudPRNT	cloudprnt_enable	Set to ENABLE or DISABLE to control the CloudPRNT service
setting	cloudprnt_url	Set to URL of CloudPRNT service.
(Supported from	cloudprnt_interval	Set CloudPRNT Polling time in sec (Range: 1 to 7200, Default value is 5)
I/F version 1.3)	cloudprnt_user	Set user name registered on CloudPRNT server. (Optional)
	cloudprnt_pass	Set password registered on CloudPRNT server. (Optional)
	alau damenta - entita d	Set CloudPRNT certification level. (0 as default)
	cloudprnt_certlevel	0: Use Bundle of CA Root Certificates



		FW Ver 1.7 or earlier: Mozilla as of: Thu Jun 18 14:06:27 2015
		FW Ver 1.8 or later: Mozilla as of: Wed Jan 1 04:12:10 2020
		1: Use custom CA certificate. (Registered by Web UI on CloudPRNT setting)
		2: Accept all (Warning - not secure)
Disconnect		Set to ENABLE or DISABLE or AUTO to control Disconnect Message function for
Message	eth_disconnectmessage	Wired network.
(Supported from	eth_line1	Set first line of message
I/F version 1.3)	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

(# 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. Star webPRNT

### ■How to enable Star webPRNT in HI01X

\*The default setting of Star webPRNT is "Enable" Visit the web configuration utility to enable Star webPRNT.

- 1. Select "Web Print" after "Login"
- 2. Select "ENABLE" in Star webPRNT Service section
- 3. Click "Submit" button.

Star Intelligent Network Utility				
Network Configuration	Device Model:IFBD-HI01X/02X Mac Address :00:11:E5:05:CD:1C			
<ul> <li>System Configuration</li> <li>Change Password</li> </ul>	WebPRNT			
Star Cloud Services     CloudPRNT     WebPRNT	WebPRNT Service			
<ul> <li>SSL/TLS</li> <li>WLAN IP Config</li> <li>Wireless Connection</li> </ul>	TCP Port Number			
<ul> <li>&gt; Firmware Update</li> <li>&gt; Set Default</li> <li>&gt; Save</li> </ul>	3 submit	cancel		

4 The following message is shown. Select "Save".

Web Print is	accepted.
TCP Port Number:	
80	
WebPRNT Service	
ENABLE	
Pleas	e execu <mark>re <b>"Save"</b> m</mark> enu if these settings are correct.
	Return to Previous page (WebPRNT)
	(Don't use ″Back″ button of browser to return.)

- 5 Select "Save-> Configuration printing -> Restart device"
- 6 Click "execute" button. Then printer executes reboot and setting is finished.

Save			
5 ■Save → Configuration printing → Restart device			
©Save → Restart device			
execute	cancel		

Fin



## ■How to set BCR for Star webPRNT (example: mPOP-BCR)

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

#### [Star SCD222U]

Please connect to USB A port on HI01X interface and power on a printer, HI01X firmware will detect automatically if there is a supported device. (Firmware Version 1.4 or later)

#### [mPOP-BCR1 / Zebra DS9208]

Visit the web configuration utility.

1. Select [System Configuration] menu

star	Star Intelligent Network Utility
Configuration	Device Model:IFBD-HI01X/02X Mac.Address :00:11:E5:05:CC:98
<ul> <li>&gt; IP Parameters</li> <li>&gt; System Configuration</li> <li>&gt; Change Password</li> </ul>	Mac / (dar 055 .55.11.20.50.00.00
	1 System Configuration
Star Cloud Services	Network
➤CloudPRNT	
>WebPRNT	
> SSL/TLS	Web Refresh Interval Time (Sec.)
▶ WLAN IP Config	5
> Wireless Connection	#9100/9101 port

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)





Barcode Reader Device		
Type: vid: pid:	Generic HID Keyboard Scanner	

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

|--|

4 The following message is shown. Select "Save".

Please execute <b>"Save"</b> menu if these settings are correct. ④		
Return to <b>Previous page <system configuration=""></system></b> (Don't use "Back" button of browser to return.)		

- 5 Select "Save-> Configuration printing -> Restart device"
- 6 Click "execute" button. Then printer executes reboot and setting is finished.

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

Fin



## ■Star webPRNT demo

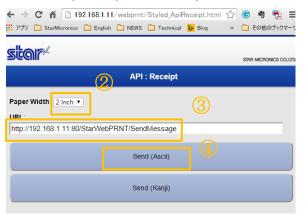
Open the web browser (Safari, Chrome) and put "<u>http://IPaddress/webprnt/A002.html</u>" into web-browser to visit Star webPRNT demo site. Star webPRNT demo site which is located in IFBD-HI01X is shown as below.

#### <Print demo>

1. Select "Text Receipts" to make print demo

← → C ① 保護されていない通信   192.168.1.197/webprnt/A002.html	아 🗟 ☆ 🗄	
SUR MCRONCS CO. UT		
Star WebPRNT Menu		
Text Receipt	>	
Image Receipt (Canvas)	>	
Text (Canvas)	>	
Barcode Print (Canvas)	>	
Figures (Canvas)	>	
Handwriting (Canvas)		
Image File (Canvas)	>	
Barcode Scan / Status Manager	>	
Display	>	
Display / Display Manager	>	
Star WebPRNT API	>	
stor~		

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



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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 Scan / Status Manager".

← → C ① 保護されていない通信   192.168.1.197/webprnt/A002.html	어 🗟 🕁 :
star	STAR MICRONICS CO, LTD.
Star WebPRNT Menu	
Text Receipt	•
Image Receipt (Canvas)	>
Text (Canvas)	>
Barcode Print (Canvas)	>
Figures (Canvas)	>
Handwriting (Canvas)	>
Image File (Canvas)	>
Barcode Scan / Status Manager	>
Display	>
Display / Display Manager	>
Star WebPRNT API	>
star webPRNT	

2. Put "http://"IPaddress" /StarWebPRNT/SendMessage" into the URL of web app sample.

star			STAR MICRONICS CO, LTD.
	Bar	code Scan / Status Manager	
URL:	http://192.168.1.197/StarWebPRN	T/SendExtMessage (2)	
Extension Function:	connect	disconnect	
Manager State:	Not connected		
Printer Status:	-		



3. Click "connect" button, then the following messages are shown in "Extension Event Result"

12:31:40	onPrinterOnline
12:31:40	onPrinterPaperReady
12:31:40	onPrinterCoverClose
12:31:40	onCashDrawerClose
12:31:40	onStatusUpdate
12:31:40	onBarcodeReaderConnect

e.g.

URL:	http://192.168.1.197/Sta	WebPRNT/SendExtMessage		
Extension 3 Function:	connect	discon	nect	
Manager Stat	e: Connected			
Printer Status	s: 0000000			
Barcode Data	(String): 'f-\xff] are converted [\xXX].			
Extension Eve				
12:31:40 onP 12:31:40 onC 12:31:40 onS	rinterPaperReady rinterCoverClose ashDrawerClose			

4. When scan the barcode data,

the scanned data is shown in "Barcode data" and event is shown in "Extension Event Result" e.g.

<barcode data=""></barcode>	
	4901777317680
<response></response>	
	onBarcodeDataReceive

5. Finish barcode control, click "disconnect"



star			STAR MICRONN	CS CO, UTD.
	Barco	de Scan / Status Manager		
URL:	http://192.168.1.197/StarWebPRNT/S	endExtMessage		
Extension Function:	connect	disconnect		
Manager State: 0			(5)	
Printer Status: 0 Barcode Data(Strin *[w00/w20] and [w7f-wff] 4901 777317680 [¥x04	iq): are converted [\vXX].			
12:31:40 onPrinto 12:31:40 onCashD 12:31:40 onStatu: 12:31:40 onBarco	erOnline erPaperReady erCoverClose rawerClose			
		Clear		

Fin



#### <Customer Display demo>

1. Select "Display / Display Manager".

<ul> <li></li></ul>	아 🔤 ☆ :
star	STAR MICRONICS CO, LTD.
Star WebPRNT Menu	
Text Receipt	•
Image Receipt (Canvas)	>
Text (Canvas)	>
Barcode Print (Canvas)	>
Figures (Canvas)	>
Handwriting (Canvas)	>
Image File (Canvas)	>
Barcode Scan / Status Manager	>
Display	>
Display / Display Manager	>
Star WebPRNT API	>

2. Put "http://"IPaddress" /StarWebPRNT/SendMessage" into the URL of web app sample.

star			STAR MICRONICS CO, LTD.
		Display Sample	
URL:	http://192.168.1.197/StarWebPRNT/		
Extension Function:	connect	disconnect	]
Manager State:	Not connected		

3. Click "connect" button, then the following messages are shown in "Extension Event Result"

e.g.					
	11:12:26	onDisplayConne	ct		
← → C (	 ) 保護されて	ていない通信   19216	58.1.197/webprnt/Styled_ExtDisplay.ht	tml	☆ :
					A .
star				STAR MICRO	NICS CO, LTD.
			Display Sample		
URL:	http://192.7	168.1.197/StarWebPR	RNT/SendDisplayExtMessage		
Extension 3 Function:		connect	disconnect		
Manager State:	Connected				
Text Sample:	Pattern 1	▼ Send	]		
Image Sample	Image 1	▼ Send			
	sta	<u>କାମ୍ୟ</u>			
Back Light:	Turn On	▼ Send			
Cursor:	Off	▼ Send			
Cursor Position:	X: 1 ▼ Y	Send	]		
Contrast:	Default	▼ Send			
Character Set (International)		▼ Send	]		
Character Set (Code Page):	cp437	▼ Send	]		
Clear:	All	▼ Send	]		
Extension Ever 11:12:26 onDi 11:12:29 onWr	splayConnect	t			1
			Clear		



- When it writes the customer display data(Please push any "Send" button), event is shown in "Extension Event Result"
  - e.g.

11:12:29	onWrite

5. Click "disconnect" button, then the following messages are shown in "Extension Event Result"

← → G (	∂ 保護されていない	∖通信│192.168.1	197/webprnt/Styled_	ExtDisplay.html		ቷ :
star						STAR MICRONICS CO, LTD.
			Display Sam	ple		
URL:	http://192.168.1.1	97/StarWebPRNT/	/SendDisplayExtMes	sage		
Extension Function:	con	nect	discor	nect	5	
Manager State:	Connected				•	
Text Sample:	Pattern 1 🔹	Send	4			
image Sample	: Image 1 ▼	Send				
Back Light:	Turn On	Send				
Cursor:	Off					
Cursor Position:	X: 1 • Y: 1 •	Send				
Contrast:	Default •	Send				
Character Set (International)		Send				
Character Set (Code Page):	cp437 •	Send				
Clear:	All	Send				
Extension Even 11:12:26 onDi 11:12:29 onWr	splayConnect					
			Clear			

Fin

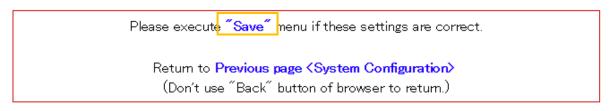
### 6. CloudPRNT

### How to set CloudPRNT in HI01X/02X

- 1. Select [CloudPRNT] menu of WebUI.
- 2. Select "ENABLE". (Factory setting is ENABLE)
- Put server URL (Factory setting is <u>https://cloudprnt.starmicronicscloud.com/cpdevice</u>) (This setting is just pre-setting, so please change to the available server url)
- 4. Set polling time e.g. [5] seconds (Factory setting : [120] seconds)
- 5. Set User Name and Password if the server request. (If required)
- 6. Click "Submit" button.

Configuration	Device Model:IFBD-HI01X/02X MAC Address :00:11:62:0D:82:98	
> IP Parameters		
System Configuration	CloudPRNT	
Change Password		
Star Micronics Cloud		
➤ CloudPRNT	CloudPRNT Service	
> WebPRNT	ENABLE 🔻	
SSL/TLS		
> WLAN IP Config	Server URL	
> Wireless Connection	https://cloudprnt.starmicronicscloud.com/cpde	
Firmware Update		
▶Set Default	Polling time (Sec.)	
Save	120	
Display Status		
Network Card Info	User Name	
>Network Status		
> Device Info		
> Device Status	Password	
> Wireless Status		
System Access		
> Logout	submit	cancel

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.

	Save	
	Save $\rightarrow$ Configuration printing $\rightarrow$ Restart device	
8	©Save → Restart device	
9	execute	cancel

- 10. To use secure HTTPS communication to server, please set CA-certification to follow server specification.
  - 0: Use Bundle of CA Root Certificates

FW Ver 1.7 or earlier - Mozilla as of: Thu Jun 18 14:06:27 2015

FW Ver 1.8 or later - Mozilla as of: Wed Jan 1 04:12:10 2020

- 1: Use custom CA certificate. (Registered by Web UI on CloudPRNT setting)
- 2: Accept all (Warning not secure)
- 11. (If select "1: Use custom CA certificate set" at "10.") Click "Browse.." button and select custom CA certificate file. And click "upload" button. Also Select "Previous page <CloudPRNT>" link and select "1: Use custom CA certificate" again.



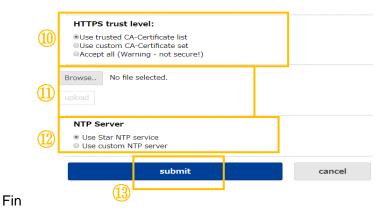
12. Select NTP server to obtain the calendar and precious time information.

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.

13. Click "Submit" button, and execute "save" by following 7. 8. 9.

#### HTTPS Client Settings



\* 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

#### [Star SCD222U]

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 / Zebra DS9208]

Visit the web configuration utility.

1. Select [System Configuration] menu

Star Intelligent Network Utility		
Configuration	Device Model:IFBD-HI01X/02X Mac Address :00:11:E5:05:CC:98	
System Configuration     Change Password	System Configuration	
<ul> <li>Star Cloud Services</li> <li>CloudPRNT</li> </ul>	Network	
> WebPRNT > SSL/TLS	Web Refresh Interval Time (Sec.)	
<ul> <li>&gt; WLAN IP Config</li> <li>&gt; Wireless Connection</li> </ul>	¤ #9100/9101 port	

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

Barcode Reader Device					
Type:	ype: Auto Detect				
	Auto Detect	ed to d€			
	None				
	Star mPOP-BCR1				
Keyb	DS9208				
vid:	Generic HID Keyboard Scanner				

\* 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"

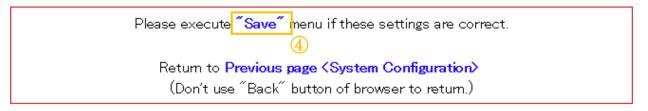
(Windows button > Computer > Manage (right click)

Barc	code Reader Device
Type: vid:	Generic HID Keyboard Scanner •
pid:	
	Note: "Auto Detect" can not be used to detect Generic HID Keyboard type barcode readers.

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

③ submit	cancel
----------	--------

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.

	Save	
7	Save → Configuration printing → Restart device	
	©Save → Restart device	
6	execute	cancel





### [HID Keyboard Device]

Visit the web configuration utility.

1. Select [System Configuration] menu

star	Star Intelligent Network Utility
Configuration	Device Model:IFBD-HI01X/02X Mac Address :00:11:E5:05:CC:98
System Configuration     Change Password	System Configuration
<ul> <li>Star Cloud Services</li> <li>Cloud PRNT</li> </ul>	Network
> WebPRNT > SSL/TLS > WLAN IP Config	Web Refresh Interval Time (Sec.)
Wireless Connection	#9100/9101 port

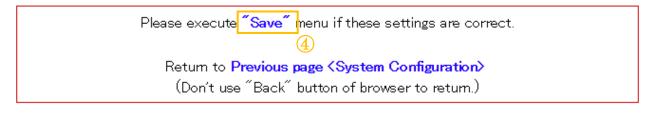
2. Select "vid:" and "pid:" in [Keyboard Device] and put VID and PID of HID Keyboard Device. In this case, "a" to "f" must be input as lower case. (Firmware Version 1.4 or later)

Keyboar	d Device	2
vid:		
pid:		

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

(3) submit cancel
-------------------

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			



### 7. Star Micronics Cloud

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	Printer	Interface	
Board	Model	Firmware	Supported Printer Driver / SDK
Model	INIQUEI	Version	
			Android StarIO SDK V3.X (Raster data)
		1.0	•iOS StarIO SDK V3.X (Raster data)
		1.2 1.9 or later(*1)	StarPRNT Intelligence Printer Driver (Raster data)
			Linux / Mac OS X CUPS Driver
			·CloudPRNT (Raster data)
	I01X TSP650II TSP700II TSP800II TSP650IISK	1.3 or later 1.9 or later(*1)	Android StarIO SDK V3.X
			•iOS StarlO SDK V3.X
IFBD-HI01X			StarPRNT Android SDK V5.X
			StarPRNT iOS SDK V5.X
			<ul> <li>StarPRNT WindowsStoreApps SDK V5.X</li> </ul>
			StarPRNT Intelligence Printer Driver
			<ul> <li>Linux / Mac OS X CUPS Driver</li> </ul>
			•OPOS Driver
			JavaPOS Driver
			•CloudPRNT
			•Star webPRNT
IFBD-HI02X	SP700	No Support	No Support

(As of June 2020)

(\*1) TSP650IISK is supported from FW Ver 1.9 or later

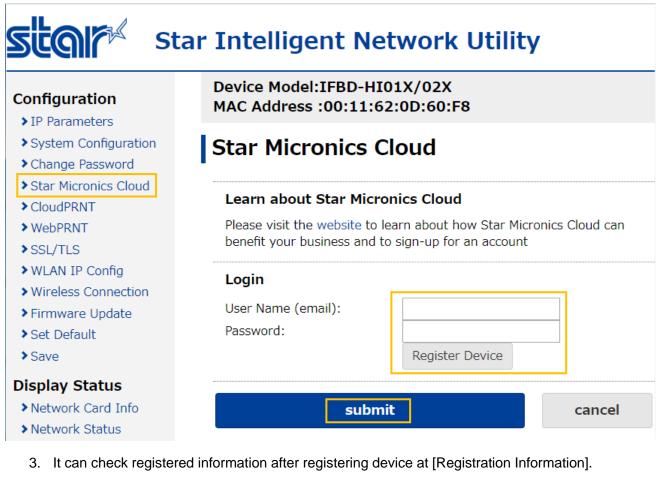
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### How to set Star Micronics Cloud in HI01X

- Select [Star Micronics Cloud] menu of WebUI.
   If it has already registered device to SCS on HI01X, then please go to "3.".
- 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 Micronics Cloud]

to create SCS account.



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(*) /	To select printing QR code size.		
	LARGE			



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".
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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.

#### Configuration

- > IP Parameters
- > System Configuration
- Change Password
- Star Micronics Cloud
- CloudPRNT
- > WebPRNT
- > SSL/TLS
- > WLAN IP Config
- > Wireless Connection
- Firmware Update
- > Set Default
- > Save

#### **Display Status**

- Network Card Info
- > Network Status
- > Device Info
- > Device Status
- > Wireless Status

#### System Access

> Logout

#### Contact us

- Star Web Site
- > E-Mail

#### Device Model:IFBD-HI01X/02X MAC Address :00:11:62:0D:60:F8

### **Star Micronics Cloud**

#### Learn about Star Micronics Cloud

Please visit the website to learn about how Star Micronics Cloud can benefit your business and to sign-up for an account

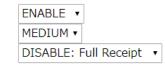
#### Registration

Retailer: Device Name: DeviceID: **Refresh Information** Re-register This Device

#### Connect To Dashboard

## Services

Upload Data: QR Code Print Size: Micro Receipt:



٠

Micro Receipt setting can be changed in real-time using the Micro Receipt Control page.

### Configuration

Time Zone:

#### Europe/London Determine from browser location

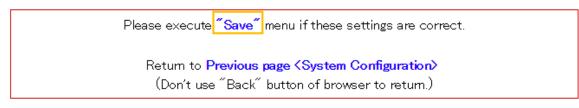
submit

cancel



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7. Select "Save".



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

Save					
	●Save → Configurat				
	©Save → Restart de	viœ			
		execute			cancel



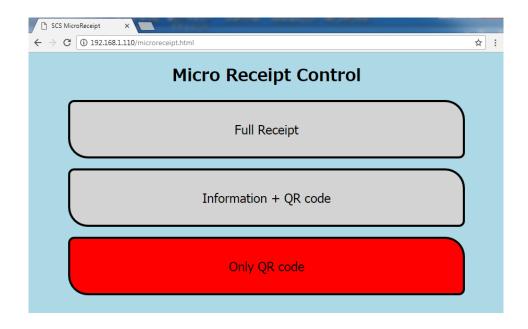
### ■How to use "On demand" function for Micro Receipt

"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.

Click a link on the "Star Micronics Cloud -> Services-> Micro Receipt" of Web Config UI.
 Or please input the URL which is <a href="http://cprinterIPAddress>/microreceipt.html">http://cprinterIPAddress>/microreceipt.html</a> on web browser.

Services			
Upload Data:	ENABLE 🔻		
QR Code Print Size:	SMALL •		
Micro Receipt:	Only QR code 🔹		
Micro Receipt setting can be changed in real-time using the Micro Receipt Control page.			

 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 Micronics Cloud in HI01X".





### 8. DNS Setting

HI01X/02X supports specifying DNS server as optional from IFBD-HI01X V1.5.0 (Sep, 2018). It can be set by using Web Configuration Utility of HI01X/02X.

### How to set specified DNS Setting in HI01X/02X

- 1. Select [System Configuration] menu of WebUI.
- 2. Scroll down on the bar of right hand side and input specified DNS Server's IP address. (Please input the IP at "DNS 1" or "DNS 2")

# Star Intelligent Network Utility

Configuration IP Parameters	Device Model:IFBD-HI01X/02X MAC Address :00:11:62:0D:60:F8
System Configuration	System Configuration
Change Password	System comgaration
Star Micronics Cloud	Network
➤ CloudPRNT	Network
> WebPRNT	
SSL/TLS	Web Refresh Interval Time (Sec.)
> WLAN IP Config	5
> Wireless Connection	
Firmware Update	#9100/9101 port
≯ Set Default	ENABLE V
> Save	
Display Status	#9100 Multi Session
Network Card Info	
Network Status	
> Device Info	DNS Setting
> Device Status	Divis Setting
Wireless Status	
	DNS 1:
System Access	8.8.8.8
▶Logout	
	DNS 2:
	8.8.4.4



3. Click "Submit" button in the bottom of this screen.



4. Click the menu [Save].

Select any of the following, the click Execute:

- •Save  $\rightarrow$  Configuration Printing  $\rightarrow$  Restart device
- •Save  $\rightarrow$  Restart device

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

Star Intelligent Network Utility				
Network Configuration	Device Model:IFBD-HI01 X/02X			
<ul> <li>IP Parameters</li> <li>System Configuration</li> </ul>	Mac Address :00:11:E5:05:CD:1C			
Change Password CloudP RNT	Save			
> WebPRNT				
> SSL/TLS > WLAN IP Config	Save → Configuration printing → Restart device			
<ul> <li>Wreless connection</li> <li>Firmware Update</li> </ul>	©Save → Restart device			
<ul> <li>Set Default</li> </ul>	execute cancel			
> Save				

Fin



### **Appendix A. Term and Condition**

 $\label{eq:please refer} \ensuremath{\mathsf{Please refer to}}\xspace \ensuremath{\mathsf{https://www.starmicronicscloud.com/legal/retailers/terms-and-conditions/}.$ 

### Appendix B. Privacy Policy

Please refer to <u>https://www.starmicronicscloud.com/legal/retailers/privacy-policy/</u>.



### <u>History</u>

Rev 1.0	29th September 2016	Official Release
Rev 1.1	13 <sup>th</sup> January 2017	Applicable printer models added
		BCR setting Changed
Rev 1.2	27 <sup>th</sup> September 2017	Added 3 supported WiFi dongles
		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	9 <sup>th</sup> March 2018	Added Peripheral Device setting for CloudPRNT function
Rev 1.4	12 <sup>th</sup> September 2018	Added USB Memory Firmware Update feature
		Added Customer Display Device support for webPRNT function
		Added specified DNS server setting feature
		Renamed from Star Cloud Services to Star Micronics Cloud
		Added factory setting for CloudPRNT settings
		Added Appendix A and Appendix B
		Revised the address of company
Rev 1.5	8 <sup>th</sup> February 2018	Revised written errors
		Revised the address of company
Rev 1.6	24 <sup>th</sup> June 2019	Revised written errors
		Added 2 supported WiFi dongles
Rev 1.7	9 <sup>th</sup> September 2019	Added Change Password description at "Web configuration utility"
Rev 1.8	7 <sup>th</sup> November 2019	Added WiFi dongle description.
Rev 1.9	28 <sup>th</sup> February 2020	Added Notes at introduction
		Revised image/description for web configuration of CloudPRNT.
Rev 2.0	17 <sup>th</sup> June 2020	Added applicable printer model

