Hybrid Printer



Software Manual – for OPOS Driver –



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Introduction

The HSP7000 provides an OPOS driver and printer drivers to support various types of usage. This document explains how to install and use the OPOS drivers. For information about using the printer driver, refer to the printer-driver software manual.

1. Installing/Uninstalling

Before using the HSP7000 with Windows 2000, XP, or Vista, you must first install the printer drivers. If you have already installed an HSP7000 printer using CD1.0, you must first uninstall it before proceeding with installation of the driver software described here. Refer to the software manual in HSP7000 CD1.0 for information about how to uninstall.

```
    Important: 1) Administrator privilege is required to run the installation.
    2) If you uninstall OPOS under 64-bit windows, the USB vendor-class driver will be also be removed.
```

1.1 Installing

Important: If you are connecting to the printer by USB, complete this procedure before turning the printer on.

① Insert the included CD-ROM into your PC's CD-ROM drive. If an Autorun confirmation dialog appears, click **Run Autorun.exe**. When the following window appears, click **Installation—OPOS Driver**.



Important: This procedure will not install the user manual onto your disk. If you wish to install the manual onto your disk, click Installation—Manual.



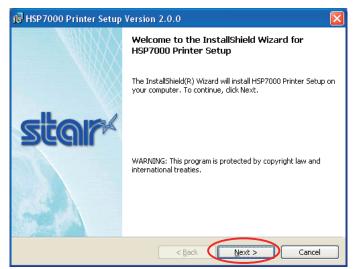
② Read the license agreement. If you agree with the terms and conditions of the agreement, click I Accept.



③ If you are using Vista, the User Account Control dialog appears. Click Continue. The following window appears, and the wizard prepares to start the installation. The time required for installation may be longer than usual depending on the environment used.



④ Click the **Next>** button to proceed.





Hybrid Printer **HSP7000**

⑤ Type your user information.

After typing your user name and the name of your organization and selecting whether the installed program is to be available to all users of this computer or only to you, click the **Next>** button.

🕞 HSP7000 Printer Setup Version 2.0.0	
Customer Information Please enter your information.	star
User Name: Administrator Organization: EtarMicronics	
Install this application for: Anyone who uses this computer (all users) Only for me (Administrator)	
InstallShield	:> Cancel

- 6 Select the type of setup.
 - Select **Complete** to install all of the program's features, and then click the **Next>** button.

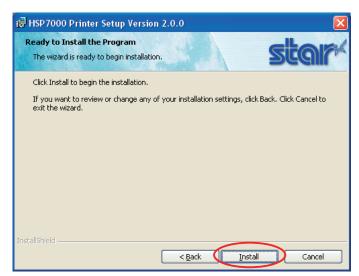
17	HSP7000 Pri	nter Setup Version 2.0.0
	Setup Type Choose the set	up type that best suits your needs.
	Please select a	setup type.
\langle	© Complete	All program features will be installed. (Requires the most disk space.)
	Cu <u>s</u> tom	Choose which program features you want installed and where they will be installed. Recommended for advanced users.
Ins	tallShield ———	< Back Next > Cancel

Notes

The configuration utilities will not be installed if you are using 64-bit Windows or Windows 2000 SP2 or earlier.



⑦ Click the **Install** button to begin the installation.



③ The wizard has completed installation of the program. Click the Finish button to close the wizard.

뤻 HSP 7000 Printer Setup	Version 2.0.0
	InstallShield Wizard Completed
star	The InstallShield Wizard has successfully installed HSP7000 Printer Setup. Click Finish to exit the wizard.
	< Back Einish Cancel

(9) Click **Exit** to close the following dialog box. Continue with the next section and add a printer.



(1) This completes the installation of the OPOS driver.

If using a USB interface

If using a USB interface: Connect the printer to the computer with a USB cable, and turn the printer's power ON. The computer's Plug and Play capability will detect the new hardware and automatically make the appropriate device settings.

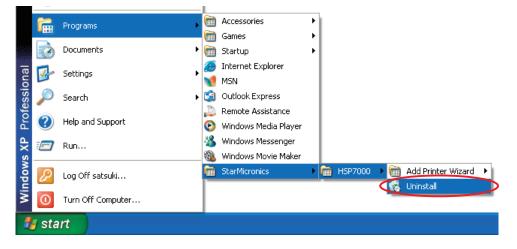


1.2 Uninstalling

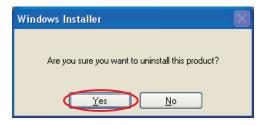
To uninstall the driver, proceed as follows.

Important: If you uninstall OPOS on 64-bit Windows, the uninstall process will also remove the USB vendor-class driver.

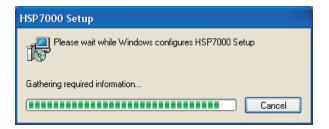
- ① Turn off the power switch of the HSP7000.
- ② From the Windows Start menu, select Programs StarMicronics HSP7000 Uninstall.



③ When the following confirmation dialog box appears, click the Yes button to continue.



④ The uninstaller launches to remove all of the HSP7000 software from your computer.





2. Features

2.1 OPOS Driver

OPOS (Open Point of Service) is an architecture supporting Win32-based POS access. The architecture makes it easy for Windows-based POS systems to access POS peripherals.

The OPOS driver makes it easy for the printer not only to output data to peripherals but also to read the current operating status of peripherals. In addition, the driver enables use of any of the many existing OPOS-compliant applications.

The driver provided here conforms to OPOS Version 1.8.

2.2 Star HSP7000 Configuration Utility

The Star Configuration Utility provides an easy way to set the printer's memory switches, to register graphic logos, and to make other such hard print settings.

It also offers an easy way to set up an Ethernet interface card.

Also, note that you may choose to install the utility only, without also installing the driver software.

Important: This function is supported by Windows 2000 (SP3 or later)/XP/Vista 32-bit edition.



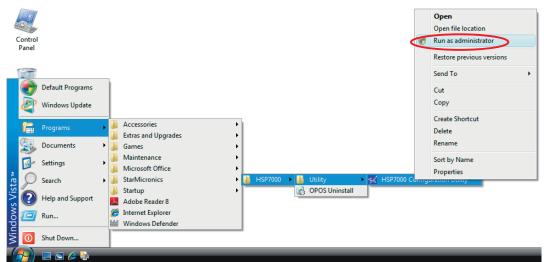
3. Star Configuration Utility (Windows 2000 SP3 or Later/XP/Vista 32-Bit Edition)

This software is supported by Windows 2000 (SP3 or later)/XP/Vista 32-bit edition. The **Star Configuration Utility** allows you to set a variety of print-related settings.

Open the Printer Configuration Utility dialog as follows.

Windows Vista 32-Bit Edition

From the Windows Start menu, select **Programs – StarMicronics – HSP7000 – Utility**, right-click **HSP7000 Configuration Utility**, and then select **Run as administrator**.



In the User Account Control dialog box, click the Continue or Allow button.

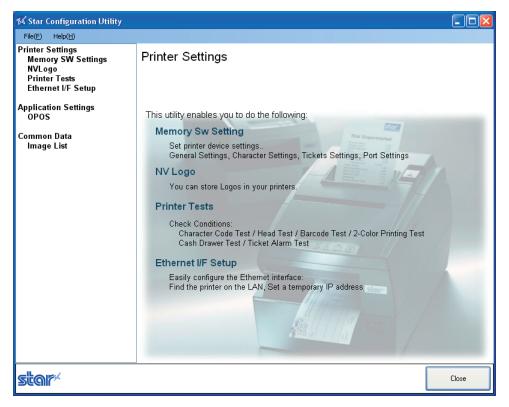
🔣 Star Configuration Utility	
File(E) Help(H)	
Printer Settings Memory SW Settings NVLogo Printer Tests Ethernet I/F Setup	Printer Settings
Application Settings OPOS	This utility enables you to do the following:
Common Data Image List	Memory Sw Setting Set printer device settings. General Settings, Character Settings, Tickets Settings, Port Settings NU Logo Wo can store Logos in your printers. Printer Tests Check Conditions: Character Code Test / Head Test / Barcode Test / 2-Color Printing Test Cash Drawer Test / Ticket Alarm Test Ethernet I/F Setup Magily configure the Ethernet interface: Find the printer on the LAN, Set a temporary IP address
star	Close

Important: If you are using Windows 32-bit Vista, you must select Run as administrator when opening the configuration utility. If you do not run these operations as administrator, any changes that you make may not work as expected.



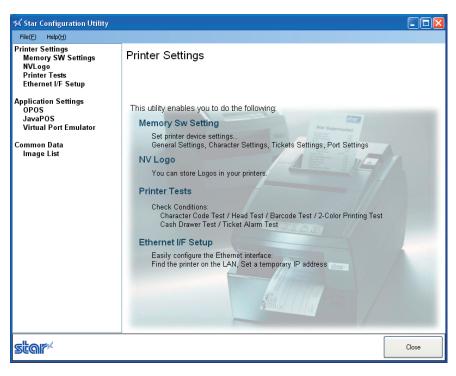
Windows 2000 SP3 or Later/XP

At the Windows Start menu, select **Programs — StarMicronics — HSP7000 — Utility — HSP7000 Configuration Utility**.



Notes

If you have installed the OPOS driver as well as the printer drivers, a somewhat different dialog will open, providing access to features from all of these drivers.





Menu Bar

(1) File

Rescan Ports for Printer

Rescans the ports.

To rescan, click Yes.

🖋 Star Configuration Utility	Rescan Ports for Printer
File(F) Help(H) Rescan Ports for Printer(S) Select USB Data Transmission mode(D) Close(X) Emernet UF Setup	The port data contained in the XML file will be deleted and rescanned. Do you want to continue?

Select USB Data Transmission Mode

You can use this feature to set a smaller transmission size. In some cases, use of USB hubs may cause incorrect printing. If you are having this problem, check the checkbox.

🖋 Star Configuration Utility	🕼 USB Data Transmission	×
File(F) Help(H) Rescan Ports for Printer(S) Select USB Data Transmission mode(D) Close(X) Ethermet f/F Setup	Cancel	

Important: Checking the USB transmission mode checkbox may in some cases cause a drop in the printing speed.

(2) Help

Version

Select Help (H) — Version (V) to display the version of Star Configuration Utility.





3.1 **Printer Settings**

Hybrid Printer HSP7000

Use the printer settings to set the memory switches, set up NV logos, carry out printer tests, and configure the Ethernet interface.

Printer Settings

This utility enables you to do the following: Memory Sw Setting Set printer device settings.. General Settings, Character Settings, Tickets Settings, Port Settings **VV Logo** You can store Logos in your printers. Printer Tests Check Conditions: Character Code Test / Head Test / Barcode Test / 2-Color Printing Test Cash Drawer Test / Ticket Alarm Test Ethernet I/F Setup Easily configure the Ethernet interface: Find the printer on the LAN, Set a temporary IP address

If you select any of the items, the top part of the dialog box will display the name of the connected printer, the name of the port it is connected to, the current emulation, and a **Configure Port** button.

Select the model name, port name, and emulation according to the environment used.

Medel Name :	Port :		Emulation .	
	COM1	~	Star Line Mode	Configure Port

Notes

Printer settings correspond to usage in **Star line mode** and **ESC/POS mode**. Select the emulation, and make settings at the printer side, in accordance with the application you are using.

Important:When using an Ethernet interface, the TCP/IP port will appear in the Port list
by clicking the Search LAN for Printers button in Ethernet I/F Setup.



Click the **Configure Port** button to display the configuration dialog box for the selected port. After making the appropriate settings, click the **OK** button.

Model Name : Port : COM1		Emulation : Star Line Mode	Configure Port
<lpt> <usb></usb></lpt>			
🛠 Configure Port			
Timeout (milliseconds) Transmission Retry: 15000	OK Cancel		
<com></com>			
N ComSetting			
Port Settings			
Bits Per Second: 9600	▼		
Data bits: 8 Parity: Even	×		
Stop bits: 1	×		
Flow Control: Hardware			
Resto	re Printer's Defaults		
Timeout (milliseconds)			
Transmission Retry: 1500)		
	Cancel		

Important:Match the port configurations to the printer settings.
The printer settings can be confirmed using the self-printing.
For details, refer to the Hardware Manual.

Notes

In the configuration utility, the **Flow Control** for the serial interface cannot be set to **Xon/Xoff**. If the printer setting is **Xon/Xoff**, change it to **DTR** and set the port configuration setting to **Hardware**.



3.1.1 Memory SW Settings

In Memory SW Settings, the printer memory switch settings can be loaded and written.

Select the model name, port name, and emulation according to the environment used, and then click the **Load Settings** button to read the printer's current memory switch settings.

Memory SW Settings

LPT1	Star Line N	1ode 🔽 Configure Port.
General Characters Paper Feed		Load Setti
Paper Width	80mm (72mm print area) *	~
Print Mode	Monochrome *	Vrite Setti
Print Speed	150mm/second *	~
Default Print Density	130%(darkest)	~
Cut by consecutive <lf></lf>	Disable *	*

Notes

Values marked with * are the factory defaults.

Important: Before clicking the button to load the settings, confirm that the model name, port name, and emulation settings match the printer settings.



To change the memory switch settings, select items to change from the drop-down menus, and then click the **Write Set**tings button.

The displayed settings are written to the printer.

Memory SW Settings

Model Name : Port :		Emulation :	
сом1	*	Star Line Mode 🛛 🔽	Configure Port
General Receipt Station 1 Receipt S	Station 2 Slip/Validation		Load Settings
Chinese	Invalid	~	Write Settings
Zero Style	Not Slashed *	*	
International Character Set	USA *	*	2
Code Page	Normal *	~	
<cr> Code</cr>	Perform Line Feed	~	
MICR mode	Bottom *	~	
		(* E ()))	

(*: Default setting)

Important:Click the Write Settings button to make your changes effective.After changing the settings, be sure to click the Write Settings button.



3.1.2 NVLogo

NVLogo is a function for registering image data, selected from data pre-registered in the **Image List**, to the printer in order to print them on the top or bottom of the page.

1077000	V LPT1		*	Star Line Mode 🛛 👻	Configure P
NVLo	go List				
No	Logo Name	Target	Size		
			Previ	ew	
			0		
			193		
			1		
			97		
The loa	os in the above "NVLogo	List" are temporarily a	ssigned by	this utility and NOT retriev	ed from the printe
Please	click the "Print" button be	low to confirm the log	os stored in	n the printer.	
- List-		D	inter		
	Add Dele		Writ	e Print	Delete A

Important:The "NVLogo List" is a list of the data registered in the computer.
To check the images registered in the printer, click the Print button.



① Click the **Add** button.

NVLogo

lo	go List	Taraat	Size		
10	Logo Name	Target	Preview		
			1.4		
			1		
			- /		
				utility and NOT retriev	

② Select the image that you want to register in the printer, and then click the Use button.

mage Name	Target	Size	Preview
mage1	Receipt	62mm x 21mm	
mage2	Beceipt	60mm x 41mm	
mage3	Slip	67mm x 64mm	



NVLogo

- ③ The selected graphic data is added to the NVLogo List. To register multiple images in the printer, repeat steps ① and ②. To delete the selected image from the NVLogo List, click the **Delete** button.
- ④ When you have moved all graphic data to register into the NVLogo List, click the **Write** button. Data shown in the NVLogo List is written to the printer.

odel N	ame: Port:		*	Emulation : Star Line Mode	Configure Port
NVLog No	jo List Logo Name	Target	Size	62mm x 21mm	
1	Image1	Receipt	Previ	9W	
			5	sil g	
	os in the above "NVLogo List slick the "Print" button below		stored in		ved from the printer.
	Add Delete		er Write	Print	Delete All

Clicking the **Print** button will generate a thermal printout of all of the NV logo data written to the printer. This makes it possible for you to check all of the image data currently registered in the printer. Note that the printout of logos that are registered for slip printout will not look the same as they do on slips, since the print density of the thermal printer is different.

To delete all of the NV logo data in the printer, click the Delete All button.

Notes

The memory capacity for NV logos in this printer is 512 KB. After clicking the **Write**, **Print**, or **Delete All** button, the printer will be reset.

Important:By executing Write, data shown in the "NVLogo List" will be overwritten to
the NV logo memory of the printer.
All data previously registered will be deleted.



3.1.3 Printer Tests

Printer Tests executes the printing function of the printer and prints several samples. Furthermore, it allows you to confirm that the peripherals work properly.

Printer Tests

del Name :	Port :	Emulati	on :	
P7000 🛛 🔽	LPT1	🖌 🖌 Star Lin	e Mode 🔽	Configure Port
Test	Prints			
Pri	nt Single Byte Characters	Receipt	Slip	Validation
Pri	nt Head Test	Receipt	Slip	Validation
Pri	nt Barcodes	Receipt		
2-0	Color Printing Test	Receipt		
Cash	Drawer/Peripheral Device			
Ca	sh Drawer 1 Test	Test		
Ca	sh Drawer 2 Test	Test		
Buzze	er/Peripheral Device			
Bu	zzer 1 Test	Test		
Bu	zzer 2 Test	Test		

Test Prints

You can check operation of each printer driver (Receipt, Slip, and Validation) by clicking the corresponding button.

Print Single-Byte Characters

Prints out the single-byte character table.

Print Head Test

If you click **Receipt**: Tests the thermal printer head by printing several lines of solid black.

If you click Slip or Validation: Tests each of the pins on the dot-impact printer head.

If white vertical lines appear in the black area of the thermal printer head test sample, please clean the printer head. For information about how to clean the head, refer to the hardware manual.

If the test sample from the dot-impact head shows missing or defective dots, or if cleaning of the thermal head fails to improve thermal print results, please contact your dealer for assistance.

Print Barcodes

Prints out all supported barcodes.

2-Color Printing Test

Executes 2-color sample printing.

For 2-color printing, confirm that paper for two colors is set. The printer performs monochrome printing if this type of paper is not set.



Cash Drawer

Cash Drawer 1 Test

Click the **Test** button to drive cash drawer 1.

This allows you to confirm that cash drawer 1 works properly.

Cash Drawer 2 Test

Click the **Test** button to drive cash drawer 2.

This allows you to confirm that cash drawer 2 works properly.

External buzzers

Buzzer 1 Test

Click the Test button to make buzzer 1 sound.

This allows you to confirm that buzzer 1 works properly.

Buzzer 2 Test

Click the Test button to make buzzer 2 sound.

This allows you to confirm that buzzer 2 works properly.

Important:Cash drawers and external buzzers are optional devices.Note that it is not possible to use buzzers and cash drawers at the same time.



3.1.4 Ethernet I/F Setup

In Ethernet I/F Setup, settings for the Ethernet interface card connected to the printer can be made using the web browser.

In addition, when using a TCP/IP port with the configuration utility, the TCP/IP port will appear in the Port list by first clicking the **Search LAN for Printers** button.

Printer List on LAN				
Printer List on LAN				
Printer List on LAN				
IP Address	Set by	MAC Address	LAN Type	Printer Info
Search LAN fo	or Printers			

Click the **Search LAN for Printers** button to search the printers connected on your LAN. If there is an applicable printer, the following dialog box will appear. Click the **OK** button.





All connected LAN printers are shown in the Printer List on LAN.

thernet I/	F Setup			Troubleshooting
Printer List on LAN				
IP Address	Set by	MAC Address	LAN Type	Printer Info
192.168.32.55	Static	00-11-62-04-83-98	100/10Base-T	HSP7000 (STR T-001)
192.168.32.88	Statio	00-11-62-04-60-02	100/10Base-T	HSP7000 (ESP-001)
Search L4	AN for Printers	Change TCP/I	P Setting	Property

Select the printer from the Printer List on LAN and click the **Property** button to display the detailed information of the current Ethernet interface for the selected printer.

Ethernet Set Up			
Ethernet I/F Detail In	formation	MAC Address	00-11-62-04-83-98
Current Condition-		Ethernet NV ROM Co	nfiguration
IP Address	192.168.32.55 - Static	IP Address	192.168.32.55
IP Version	IPv4	Subnet Mask	255.255.255.0
Subnet Mask	255.255.255.0	Gateway Address	0.0.0.0
Gateway Address	0.0.0.0	DHCP	RARP
Ethernet I/F Version I	C Ethernet I/F Version Information		Print Configration (FTP Only)
Name	IFBD-HE05/06	~ Printer Device-ID	
F/W Version	V1.0.1	MFG	Star
Boot Version	V1.0.0	CMD	STAR
PLD Version	V1.0.1	MDL	HSP7000 (STR_T-001)
Discovery Protocol In	Discovery Protocol Information		PRINTER
Protocol Name	STR_BCAST		
Protocol Version	R\$1.0.1		Close

If the printers on the LAN cannot be found, click the **Troubleshooting** button to display "Ethernet I/F Setup Trouble-shooting".



The steps to change the printer TCP/IP settings vary according to whether or not the IP address is assigned automatically by a DHCP server.

Use the steps according to the environment that you are using.

When IP Address is Automatically Assigned by DHCP Server

① Select the printer from the Printer List on LAN, and then click the Change TCP/IP Setting button.

Ethernet I/F Setup

Troubleshooting

IP Address	Set by	MAC Address	LAN Type	Printer Info
92.168.32.55	Static	00-11-62-04-83-98	100/10Base-T	HSP7000 (STR_T-001)
92.168.32.80	Static	00-11-62-04-60-02	100/10Base-T	HSP7000 (ESP-001)
Search LAI	N for Printers	Change TCP/I	PSetting	Propert

② The utility detects the Ethernet interface card type and displays the corresponding user name and the default password.

Confirm the settings, and then click the **OK** button.





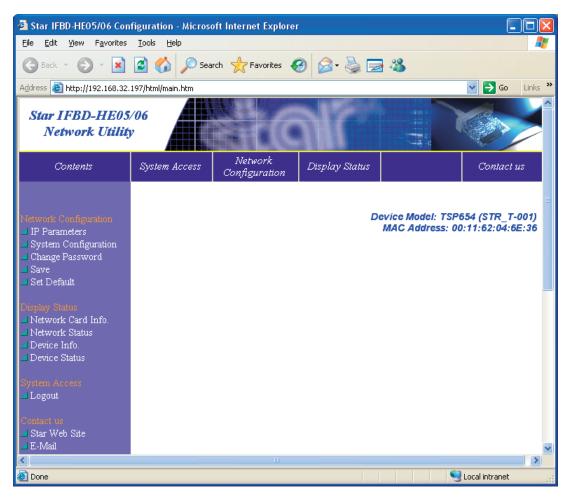
③ Enter the corresponding user name and the default password displayed in the previous dialog box, and then click the **OK** button.



Notes

The password can be changed on the web browser. If the password was changed, enter the new password.

④ The setting dialog box will appear depending on the web browser. The TCP/IP settings can be performed.





When IP Address is Not Assigned by DHCP Server

If there are no set IP addresses, you cannot move on to the Change TCP/IP Setting screen.
 If a printer was selected that does not have a set IP address, a temporary IP address can be set. Enter the IP address, and then click the **Do ARP and PING** button.

Ethernet	I/F	Setup
----------	-----	-------

IP Address	Set by	MAC Address	LAN Type	Printer Info
0.0.0.0	Didn't obtain	00-11-62-04-83-98	100/10Base-T	HSP7000 (STR_T-001
192.168.32.80	Static	00-11-62-04-60-02	100/10Base-T	HSP7000 (ESP-001)
	N for Printers			Prop
et temporary IP add Input temprary IP A			0	
	00			Do ARP and Pl
MAC Address			83 - 98	
			63 - 36	
MAC Address t temporary IP addr nput temprary IP Add	ess by ARP and Pl	NG	55	Do ARP and PIN

② When the temporary IP address is issued, the following dialog box will appear. Then click the **OK** button.



(



③ The utility detects the Ethernet interface card type and displays the corresponding user name and the default password.

Confirm the settings, and then click the **OK** button.

Etherne	t Set Up 🔀
(If Login Dialog-box appears, Please login as 'root' user. Default Password of 'root' user is 'public'.
	ОК

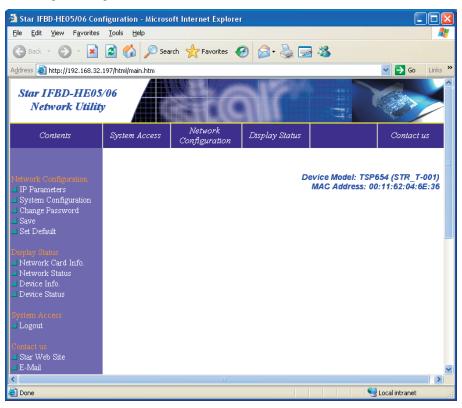
(4) Enter the corresponding user name and the default password displayed in the previous dialog box, and then click the **OK** button.

Connect to 19	2.168.32.197
IFBD-HEO5/06 User name: Password:	root Remember my password
	OK Cancel

Notes \\\

The password can be changed on the web browser. If the password was changed, enter the new password.

(5) The setting dialog box will appear depending on the web browser. The TCP/IP settings can be performed.

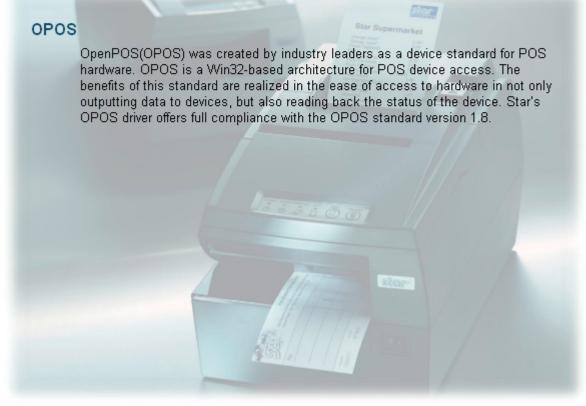


3.2 Application Settings

This is for setting each application.

Application Settings

This utility enables you to do the following:





3.2.1 OPOS

This allows you to check and set devices when the printer is used in an OPOS environment.

OPOS

POSPrinter		Control Object Reg	gistration
			Add New
Device	Model	Port	Delete
			Configure
			Check Health
1 A 1			
CashDrawer		Control Object Reg	gistration Add New
Device	Model	Port	Delete
			Configure
			Check Health
MICD		Control Object Reg	nistration
MICR			Add New
Device	Model	Port	Delete
			Configure
			Check Health

Important:Only one control object can be registered for each device.When you register a Star control object, any control object from another company will be disabled.Please be sure to register a Star control object for the printer, as correct operation cannot be guaranteed if the printer is used without registration of a control object.



Adding a Printer

Click the Add New button.

POSPrinter		Control Object Reg	gistration Add New
Device	Model	Port	Delete
			Configure
			Check Health

When clicking the Add New button, the Control Object Registration check box will be selected and the following dialog box will appear. Sets each item properly.

Add OPOS POSPrinter Device	🕺 Add OPOS POSPrinter Device	
Model: HSP7000	Model: HSP7000 Port Settinas Device Name: HSP7000_1 Bits Per Second: Port Name: COM1 Data bits: Timeout/mst: 10000 Stop bits:	8 V
✓ RecNvBitImage OK Cancel	RecNvBitImage OK Cancel	Restore Printer's Defaults
<lpt> <usb> <tcp ip=""></tcp></usb></lpt>	<com></com>	

<TCP/IP USB) LPI

The RecNvBitImage check box is selected by default.

When selected, the logo printing function using OPOS becomes enabled.

Click the **OK** button to add the printer.

Adding a Cash Drawer

Click the Add New button.

ashDrawer		Control Object Re	gistration Add New
Device	Model	Port	
			Delete
			Configure
			Check Health

When clicking the Add New button, the Control Object Registration check box will be selected and the following dialog box will appear. Sets each item properly.

🕺 Add OPOS CashDrawer	Device 🛛	14 A.	dd OPOS CashDrawer	Device		X
				HSP7000_1	Port Settinas Bits Per Second:	9600
Port Name:	LPT1			COM1 🖌	Data bits:	8
Timeout(ms): Drawer Number:	10000 CashDrawer 1		Timeout(ms): Drawer Number:	10000 CashDrawer 1	Parity:	None
Activation Pulse Width(ms):	200	Ad	ctivation Pulse Width(ms):	200	Stop bits:	1
Post Activation Pause(ms):	200	Р	Post Activation Pause(ms):	200		Restore Printer's Defaults
🗖 S	tatus Capability 🕑 Sensor Active		🔲 S	tatus Capability 🛛 Sensor Active		
	OK Cancel			OK Cancel		
<lpt> <</lpt>	USB> <tcp ip=""></tcp>			<com< td=""><td>1></td><td></td></com<>	1>	

<LPT> <USB> <TCP/IP>

If the cash drawer you use supports the status function, select the Status Capability check box if you wish to monitor the cash drawer status (open or closed).

When using the status function, refer to the following table and select or clear the Sensor Active check box according to the switch used to detect the opening of the cash drawer.

On (selected)	Switch is in the open state when the cash drawer is open
Off (cleared)	Switch is in the closed state (shorted) when the cash drawer is open

Important: The status function is enabled only if the cash drawer is equipped with a compulsion switch. Also, it is not compatible for use with a parallel interface.

Notes

When using a serial interface, match the **PortSettings** to the printer settings. The printer settings can be confirmed using the self-printing.

For details, refer to the Hardware Manual.



• Drawer Number

Select the cash drawer number.

- Activation Pulse Width (ms) Select the pulse width for the selected cash drawer.
- Post Activation Pause (ms) Select the post activation pause for the selected cash drawer.

Click the **OK** button to add the cash drawer.

Adding MICR

Click Add New.

MICR		Control Object Registration	Add New
Device	Model	Port	Delete Configure Check Health

The following dialog appears. Enter appropriate settings.

髦 Add OPOS MIC	R Device 🔀	髦 Add OPOS MIC	R Device		
Model: Device Name: Port Name: Timeout/ms1: Format:	LPT1 V 10000	Model: Device Name: Port Name: Timeout(ms): Format:	COM1	Port Settinos Bits Per Second: Data bits: Parity: Stop bits:	8 V
	OK Cancel		OK Cancel		Restore Printer's Defaults
<lpt< td=""><td>> <usb> <tcp ip=""></tcp></usb></td><td></td><td><c(< td=""><td>OM></td><td></td></c(<></td></lpt<>	> <usb> <tcp ip=""></tcp></usb>		<c(< td=""><td>OM></td><td></td></c(<>	OM>	

• Format

Select the MICR format that you wish to read.

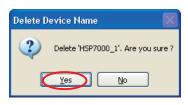
Click OK to add MICR support.



Delete

Deletes the selected printer, cash drawer, or MICR. To delete a device, select it from the OPOS device listing and click **Delete**.

When the following confirmation dialog box appears, click the Yes button to continue.



Configure

Allows you to make changes to the selected printer, cash drawer, or MICR. To change the settings for a device, select the device from the OPOS device listing and click **Configure**.

The same dialog box as when clicking the **Add New** button will appear; therefore, change the settings using the same procedure as when they were first set.

Check Health

The printer, cash drawer, and MICR **Check Health** buttons can be used to run a system check. To check the health of a device, select the device from the OPOS device listing and click **Check Health**.

The following dialog appears. If doing a printer system check, select the output device you wish to check and click **Check Health**. The system check will determine whether the selected device (printer, cash drawer, or MICR) is correctly connected, and will check that OPOS operation is correct.

SMJ OPOS POSPrinter
Station
🔾 Journal
 Receipt
◯ Slip
CheckHealth
SMJ OPOS CashDrawer
CheckHealth
SMJ OPOS MICR
SMJ OPOS MICR





3.3 Common Data

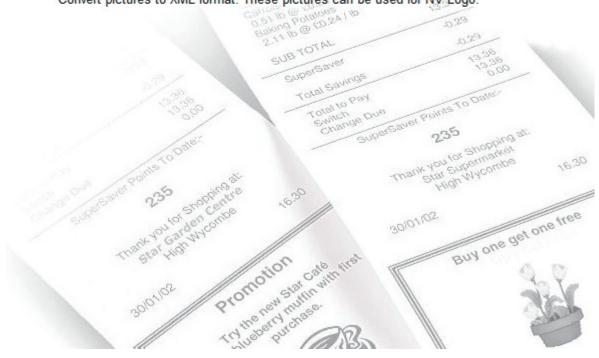
You can register graphic data that will be used as NV logos.

Common Data

This utility enables you to do the following:

Image List

Convert pictures to XML format. These pictures can be used for NV Logo.





3.3.1 Image List

The **Image List** allows you to register graphic data, such as logos that will be used repeatedly afterward, in the computer.

A test print will be made when adding graphic data; therefore, select the model name, port name, and emulation according to the environment used.

Image List

Image List Image Name	Target	Size	
inage Name	Target		
		Preview	
		- 22	
		- 57	
		7.4	
		-1/	
		- 11	
		-	

JPG, PNG, GIF, and BMP are available as formats of registerable graphic data.

Graphic data registered here is used for NV logos. For details, refer to "3.1.2 NVLogo".



Hybrid Printer HSP7000

Adding Graphic Data

① Click the **Add** button.

age Name	Target	Size
		Preview
		- 2
Add	<u>D</u> elete	Edit

O Select the graphic data that you want to register, and then click the **Open** button.

Select Image						? 🛛
Look <u>i</u> n:	🚞 SampleImages	~	6	ø	• 🖭 🥙	
My Recent Documents Desktop My Documents My Computer	CebitCoupon1 CebitCoupon2 CebitCoupon3 CebitCoupon4 Coupon1 Coupon2 Coupon3 Coupon4 Pizza SMJLogo SMJLogo SMJLogoSmall StarLogo StarLogoSmall USBCert					
	File <u>n</u> ame:	StarLogo			*	
My Network	Files of <u>type</u> :	Image Files(*,jpg;*,tif;*,gif;*,bmp)			~	Cancel



- 🕺 Convert Image Name Image1 The image width must be less than the configured printable width. Width 🔝 62 🜔 mm Dither Methods Target Error Diffusion Receipt 💿 None O Halftone 🔘 Random 🔘 Slip NoDither Conversion Options 127 (0 - 255) Brightness < Test Print 0K Cancel
- ③ The following Convert Image dialog box will appear.

The data can be adjusted here.

- Type a name to register in the Name field.
- Adjust the width of the graphic data using the slider.
- Set the appropriate dithering method.
- Adjust the options which are displayed according to the dithering method.
- Select whether the image is to be used for receipt printing or slip printing. This feature allows you to register images to match both receipt resolution and slip resolution.

Click the Test Print button to run a test print in order to check the print results of the graphic data being adjusted.

Notes

Items in the options are different depending on the dithering selected. Better printing results can be obtained by combining several settings to identify which settings are appropriate.

Important: According to differences between the actual printing properties of the printer and the display capacity of your computer display, the printing result and preview of the registered graphic data may look different in print density and other details.

It is recommended that you run a test print job to check the print result.



④ Click the **OK** button to add the graphic data to the **Image List**.

Image List

del Name : Port :		Emulation :
P1000 🔽 LPT1		Star Line Mode 🔽 Configure Port
mage List		and the second second
Image Name	Target	Size 62mm x 21mm
Image1	Receipt	Preview
		- //
		Sign
∆dd	<u>D</u> elete	Edit

The graphic data is added to the **Image List** and can be used as an **NV logo**. For details on using the data, refer to "3.1.2 NVLogo".



Deleting Graphic Data

Image List

To delete graphic data, select the unnecessary data from the Image List, and then click the Delete button.

lel Name : Port :		Emulation :
1000 🔽 LPT1		Star Line Mode 🔽 Configure Port.
nage List		
mage Name	Target	Size 60mm x 41mm
mage1	Receipt	
mage2	Receipt	Preview
mage3	Slip	
		100
		~%
		1/2 PRICE!
		72 PRICE!
		Get one main course for
		half price with your
		next visit to the
		Star pub.
		Sample youcher primed on a Star TSP200 using the advanced AutoLogo "feature.
		www.StarMicronicsEurope.com

When the following confirmation dialog box appears, click the Yes button to continue.



Editing Graphic Data

Click the **Edit** button to open the **Convert Image** dialog box. The graphic image data can be adjusted using the same procedure as when it was registered. For details, refer to the "Adding Graphic Data" item.



4. OPOS Register 2008 (Windows 2000 SP2 or earlier or Vista 64-Bit Edition)

You can use this software on Windows 2000 SP2 or earlier or on Windows Vista 64-bit edition. This application allows you to configure or confirm printer settings for use on the OPOS environment.

4.1 **POSPrinterRegister**

To configure an OPOS printer, proceed as follows.

Windows 2000 SP2 or Earlier

From the Windows Start menu, select Programs — StarMicronics — OPOS Register 2008 — POSPrinterRegister.

Windows Vista 64-bit Edition

From the Windows Start menu, select **Programs** — **StarMicronics** — **OPOS Register 2008**, right-click **POSPrinterRegister**, and then select **Run as administrator**.

The following window appears.

🖻 OPOS POSPrinter Register	•
✓ Control Object Service Object HSP7000C HSP7000D HSP7000U <- Unreg	
Exit	

The selectable printer models appear in the left list.

To configure a device, select the appropriate model name, and then click the **Reg** -> button.

If you select the Control Object check box, the Star Control Object will be registered along with the device settings.

금 OPOS POSPrinter Register	×
Image: Control Object Service Object HSP7000C HSP7000U Image: Control Object Image: Control Object <	
<u>E</u> xit	



When the following window appears, enter appropriate settings.

OPOS POSPrinter S	etting		×
Device Name :	HSP7000D	Model Name :	HSP7000D
Port :	COM1 -		
Baud Rate :	9600BPS 👻	Data Bit :	8Bit 👻
Parity Bit :	Non Parity 👻	Stop Bit :	1Bit 👻
Timeout(mS) :	10000		
CapRecPaperCut :	🔽 True/False	RecNvBitImage :	True/False
<u>R</u> eset	<u>D</u> efault	Check	<u>H</u> ealth
	ОК	Car	ncel

Device Name	Set the device name.
CapRecPaperCut	Select whether or not to use the receipt auto cutter feature. Select the check box to enable the auto cutter feature on the OPOS.
RecNvBitImage	Select whether or not to use the receipt NvBitImage feature. Select the check box to enable the logo printing feature on the OPOS.
[Reset]	Reset the settings.
[Default]	Set the settings to default values.
[Check Health]	Execute check health. Checks the system to see whether the printer will operate properly through OPOS. Set paper into the slip printer before you click the button.

Click the **OK** button to create a device with the specified settings and add the device to the registered device list.

Gentral Object Service Object HSP7000C HSP7000D HSP7000U	Reg ->	
	<u>E</u> xit	

Click **Exit** to close the registration window.

Important:1)Set the printer communication handshaking to DTR mode.

2) Configure the port settings to match the printer settings. You can check the printer settings by performing self-printing. For details, refer to the Hardware Manual.



4.2 CashDrawerRegister

To configure a CashDrawer Register, proceed as follows.

■ Windows 2000 SP2 or Earlier

From the Windows Start menu, select Programs — StarMicronics — OPOS Register 2008 — CashDrawerRegister.

Windows Vista 64-bit Edition

From the Windows Start menu, select **Programs — StarMicronics — OPOS Register 2008**, right-click **CashDrawerRegister**, and then select **Run as administrator**.

The following window appears

📼 OPOS CashDrawer Reg	jister (×
Control Object Service Object HSP7000C HSP7000D HSP7000D HSP7000D(2) HSP7000U HSP7000U(2)	<u>R</u> eg -> <- <u>U</u> nreg	
	Exit	

The selectable printer models appear in the left list.

To configure a device, select the appropriate model name, and then click the **Reg** -> button.

If you select the Control Object check box, the Star Control Object will be registered along with the device settings.

📼 OPOS CashDrawer Register	×
Control Object Service Object HSP7000C(2) HSP7000D(2) HSP7000D(2) HSP7000U(2) HSP7000U(2) HSP7000U(2)	
<u> </u>	



OPOS CashDrawer Setting × Device Name : HSP7000D Model Name HSP7000D Port : COM1 Ŧ Baud Rate : 9600BPS Data Bit : 8Bit • Parity Bit : Stop Bit : 1Bit Non Parity Ŧ • On Pulse(mS): 200 Off Pulse(mS): 200 10000 Timeout(mS) CapStatus True/False Sensor Active 📝 High/Low <u>R</u>eset Check<u>H</u>ealth OK <u>C</u>ancel **Device Name** Set the device name. CapStatus Select whether or not to use the cash drawer status feature. Select the check box to be notified of the cash drawer open or close status. **Sensor Active** Set the operation of the cash drawer open/close detection switch when the status

If the check box is selected, the open/close detection switch will be open when the cash drawer is open. If the check box is not selected, the open/close detection switch

Checks the system to see whether the cash drawer will operate properly through

When the following window appears, enter appropriate settings.

Click the **OK** button to create a device with the specified settings and add the device to the registered device list.

will be closed when the cash drawer is open.

Set the settings to default values.

feature is enabled.

Reset the settings.

OPOS.

Execute check health.

OPOS CashDrawer Register	×
Control Object Service Object HSP7000C HSP7000C(2) HSP7000D HSP7000D HSP7000U(2) HSP7000U(2) <- Unree	
<u> </u>	

Click **Exit** to close the registration window.

[Reset]

[Default]

[Check Health]

Important: Configure the port settings to match the printer settings. You can check the printer settings by performing self-printing. For details, refer to the Hardware Manual.



4.3 MICR Register

To configure an MICR, proceed as follows

■ Windows 2000 SP2 or Earlier

From the Windows Start menu, select Programs — StarMicronics —OPOS Register 2008 — MICRRegister.

Windows Vista 64-bit Edition

From the Windows Start menu, select **Programs** — **StarMicronics** — **OPOS Register 2008**, right-click **MICRRegister**, and then select **Run as administrator**.

The following window appears

I OPOS MICR Register		×
Control Object Service Object HSP7000C HSP7000D HSP7000U	<u>B</u> eg -> <- <u>U</u> nreg	
—	Exit	

The selectable printer models appear in the left list.

To configure a device, select the appropriate model name, and then click the Reg -> button.

If you select the Control Object check box, the Star Control Object will be registered along with the device settings.

Control Object Service Object HSP7000C HSP7000U C-Unree	
<u> </u>	



When the following window appears, enter appropriate settings.

OPOS MICR Setting	g		— ×
Device Name :	HSP7000D	Model Name :	HSP7000D
Port :	COM1 -		
Baud Rate :	9600BPS 👻	Data Bit :	8Bit 👻
Parity Bit :	Non Parity 🚽	Stop Bit :	1Bit 👻
Timeout(mS) :	10000		
Format :	E13B 🔹		
<u>R</u> eset		Check	<u>H</u> ealth
	ОК	<u>C</u> ar	ncel

Device Name	Set the device name.
Format	Set the format of the MICR you want to load.
[Reset]	Reset the settings.
[Default]	Set the settings to default values.
[Check Health]	Execute check health. Checks the system to see whether the cash drawer will operate properly through OPOS. Set paper into the slip printer before you click the button.

Click the **OK** button to create a device with the specified settings and add the device to the registered device list.

II OPOS MICR Register	
Control Object Service Object	
HSP7000C HSP7000D HSP7000U	
	<- Unreg
	<u>E</u> xit

Click **Exit** to close the registration window

Important: Configure the port settings to match the printer settings. You can check the printer settings by performing self-printing. For details, refer to the Hardware Manual.



5. DirectIO Specifications

The DirectIO specifications of the HSP7000 OPOS driver are as follows.

OPOS POSPrinter

DirectIO	No methods
DirectIOEvent	No events

CashDrawer

DirectIO	No methods
DirectIOEvent	No events

■ MICR

DirectIO No methods DirectIOEvent No events



6. Result Code List

POS Printer

Method	ResultCode	ResultCodeExtended
Open	OPOS_SUCCESS	-
	OPOS_E_NOSERVICE	-
	OPOS_E_ILLEGAL	-
	OPOS_E_NOEXIST	-
Close	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
ClaimDevice	OPOS_SUCCESS	-
	OPOS E CLOSED	-
	OPOS_E_ILLEGAL	-
	OPOS E TIMEOUT	-
ReleaseDevice	OPOS SUCCESS	-
	OPOS E CLOSED	-
	OPOS E ILLEGAL	_
CheckHealth	OPOS SUCCESS	-
	OPOS E CLOSED	_
	OPOS E NOTCLAIMED	_
	OPOS E DISABLED	_
	OPOS E ILLEGAL	_
	OPOS E BUSY	_
ClearOutput	OPOS_SUCCESS	_
- ··· · ··· ··· ··· ··· ··· ··· ··· ···	OPOS E CLOSED	_
	OPOS E NOTCLAIMED	_
DirectIO	OPOS E CLOSED	_
	OPOS E ILLEGAL	_
ResetStatistics	OPOS E CLOSED	_
	OPOS E ILLEGAL	_
RetrieveStatistics	OPOS E CLOSED	_
	OPOS E ILLEGAL	_
UpdateStatistics	OPOS E CLOSED	_
• F	OPOS E ILLEGAL	_
PrintNormal	OPOS SUCCESS	_
	OPOS E CLOSED	_
	OPOS E NOTCLAIMED	_
	OPOS E DISABLED	
	OPOS E ILLEGAL	
	OPOS E NOHARDWARE	
	OPOS E OFFLINE	
	OPOS E TIMEOUT	
	OPOS E BUSY	
	OPOS EXTENDED	OPOS EPTR COVER OPEN
		OPOS EPTR JRN EMPTY
		OPOS EPTR REC EMPTY
		OPOS EPTR SLP EMPTY



Method	ResultCode	ResultCodeExtended
	OPOS E CLOSED	-
PrintTwoNormal	OPOS E NOTCLAIMED	-
	OPOS E DISABLED	-
	OPOS E ILLEGAL	-
	OPOS E BUSY	-
	OPOS SUCCESS	_
	OPOS E CLOSED	-
	OPOS_E_NOTCLAIMED	-
	OPOS E DISABLED	-
	OPOS_E_ILLEGAL	-
	OPOS_E_NOHARDWARE	-
PrintImmediate	OPOS_E_OFFLINE	-
	OPOS_E_TIMEOUT	-
	OPOS_EXTENDED	OPOS_EPTR_COVER_OPEN
		OPOS_EPTR_JRN_EMPTY
		OPOS_EPTR_REC_EMPTY
		OPOS_EPTR_SLP_EMPTY
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
	OPOS_E_NOTCLAIMED	-
BeginInsertion	OPOS_E_DISABLED	-
	OPOS_E_ILLEGAL	-
	OPOS_E_TIMEOUT	-
	OPOS_E_BUSY	-
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
	OPOS_E_NOTCLAIMED	-
EndInsertion	OPOS_E_DISABLED	-
	OPOS_E_ILLEGAL	-
	OPOS_E_BUSY	-
	OPOS_E_EXTENDED	OPOS_EPTR_SLP_EMPTY
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
	OPOS_E_NOTCLAIMED	-
BeginRemoval	OPOS_E_DISABLED	-
	OPOS_E_ILLEGAL	-
	OPOS_E_TIMEOUT	-
	OPOS_E_BUSY	-
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
	OPOS_E_NOTCLAIMED	-
EndRemoval	OPOS_E_DISABLED	-
	OPOS_E_ILLEGAL	-
	OPOS_E_BUSY	-
	OPOS_E_EXTENDED	OPOS_EPTR_SLP_FORM



Method	ResultCode	ResultCodeExtended
	OPOS SUCCESS	-
	OPOS E CLOSED	-
	OPOS E NOTCLAIMED	-
	OPOS E DISABLED	-
	OPOS E ILLEGAL	-
CutPaper	OPOS E NOHARDWARE	-
oud upor	OPOS E OFFLINE	-
	OPOS E TIMEOUT	-
	OPOS E BUSY	-
	OPOS EXTENDED	OPOS EPTR COVER OPEN
		OPOS EPTR REC EMPTY
	OPOS SUCCESS	-
	OPOS E CLOSED	-
	OPOS E NOTCLAIMED	
	OPOS E DISABLED	
	OPOS E ILLEGAL	
	OPOS E NOHARDWARE	
RotatePrint	OPOS E OFFLINE	-
Kotatel IIIt	OPOS E TIMEOUT	-
	OPOS E BUSY	-
	OPOS EXTENDED	OPOS EPTR COVER OPEN
	OPOS_EATENDED	OPOS_EPTR_COVER_OPEN OPOS_EPTR_JRN_EMPTY
		OPOS_EPTR_JRN_EMPTY
		OPOS_EPTR_SLP_EMPTY
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
	OPOS_E_NOTCLAIMED	-
	OPOS_E_DISABLED	-
	OPOS_E_ILLEGAL	-
PrintBarCode	OPOS_E_NOHARDWARE	-
	OPOS_E_OFFLINE	-
	OPOS_E_TIMEOUT	-
	OPOS_E_BUSY	-
	OPOS_EXTENDED	OPOS_EPTR_COVER_OPEN
		OPOS_EPTR_REC_EMPTY
		OPOS_EPTR_SLP_EMPTY
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
	OPOS_E_NOTCLAIMED	-
	OPOS_E_DISABLED	-
	OPOS_E_ILLEGAL	-
	OPOS_E_NOHARDWARE	-
	OPOS_E_OFFLINE	-
PrintBitmap	OPOS_E_NOEXIST	-
	OPOS_E_TIMEOUT	-
	OPOS_E_BUSY	-
	OPOS_EXTENDED	OPOS_EPTR_TOOBIG
		OPOS_EPTR_COVER_OPEN
		OPOS_EPTR_BADFORMAT
		OPOS_EPTR_REC_EMPTY
		OPOS EPTR SLP EMPTY



Method	ResultCode	ResultCodeExtended
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
	OPOS_E_NOTCLAIMED	-
	OPOS_E_DISABLED	-
	OPOS_E_ILLEGAL	-
	OPOS_E_NOHARDWARE	-
TransactionPrint	OPOS_E_OFFLINE	-
	OPOS_E_TIMEOUT	-
	OPOS_E_BUSY	-
	OPOS_EXTENDED	OPOS_EPTR_COVER_OPEN
		OPOS_EPTR_JRN_EMPTY
		OPOS_EPTR_REC_EMPTY
		OPOS_EPTR_SLP_EMPTY
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
ValidateData	OPOS_E_NOTCLAIMED	-
vanualeDala	OPOS_E_DISABLED	-
	OPOS_E_ILLEGAL	-
	OPOS_E_FAILURE	-
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
	OPOS_E_NOTCLAIMED	-
SatDitmon	OPOS_E_DISABLED	-
SetBitmap	OPOS_E_ILLEGAL	-
	OPOS_E_NOEXIST	-
	OPOS_EXTENDED	OPOS_EPTR_TOOBIG
		OPOS_EPTR_BADFORMAT
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
SetLogo	OPOS_E_NOTCLAIMED	-
	OPOS_E_DISABLED	-
	OPOS_E_ILLEGAL	-
ChangeDrintSide	OPOS_E_CLOSED	-
ChangePrintSide	OPOS_E_ILLEGAL	-
MarkEaad	OPOS_E_CLOSED	-
MarkFeed	OPOS_E_ILLEGAL	-

Important:Some properties can only be set in reference to the left margin depending on
the printer.
There may be limitations to OPOS Escape Sequence and Vertical Mount (re-
verse printing) features.
For details, refer to the "Command Specifications."



Cash Drawer

Method	ResultCode	ResultCodeExtended
	OPOS_SUCCESS	-
Open	OPOS_E_NOSERVICE	-
	OPOS_E_ILLEGAL	-
	OPOS_E_NOEXIST	-
C1	OPOS_SUCCESS	-
Close	OPOS_E_CLOSED	-
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
ClaimDevice	OPOS_E_ILLEGAL	-
	OPOS_E_TIMEOUT	-
	OPOS_SUCCESS	-
ReleaseDevice	OPOS_E_CLOSED	-
	OPOS_E_ILLEGAL	-
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
CI 1.11 1.1	OPOS_E_CLAIMED	-
CheckHealth	OPOS_E_DISABLED	-
	OPOS_E_ILLEGAL	-
	OPOS_E_BUSY	-
D: 10	OPOS_E_CLOSED	-
DirectIO	OPOS_E_ILLEGAL	-
	OPOS_E_CLOSED	-
ResetStatistics	OPOS_E_ILLEGAL	-
	OPOS_E_CLOSED	-
RetrieveStatistics	OPOS_E_ILLEGAL	-
	OPOS_E_CLOSED	-
UpdateStatistics	OPOS_E_ILLEGAL	-
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
	OPOS_E_CLAIMED	-
0.0	OPOS_E_DISABLED	-
OpenDrawer	OPOS_E_NOHARDWARE	-
	OPOS_E_OFFLINE	-
	OPOS E TIMEOUT	-
	OPOS E BUSY	-
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
WaitForDrawerClose	OPOS E CLAMIED	_
	OPOS E DISABLED	-
	OPOS E BUSY	

Important: 1) If the relevant POSPrinter status is busy (for example the cover is open), the cash drawer does not open and OPOS_E_TIMEOUT occurs. 2) The WaitForDrawerClose method does not produce a beep sound.



■ MICR

Method	ResultCode	ResultCodeExtended
	OPOS_SUCCESS	-
Open	OPOS_E_NOSERVICE	-
	OPOS_E_ILLEGAL	-
	OPOS_E_NOEXIST	-
01	OPOS_SUCCESS	-
Close	OPOS_E_CLOSED	-
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
ClaimDevice	OPOS_E_ILLEGAL	-
	OPOS_E_TIMEOUT	-
	OPOS_SUCCESS	-
ReleaseDevice	OPOS_E_CLOSED	-
	OPOS_E_ILLEGAL	-
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
	OPOS E NOTCLAIMED	-
CheckHealth	OPOS_E_DISABLED	-
	OPOS_E_ILLEGAL	-
	OPOS_E_BUSY	-
	OPOS_SUCCESS	_
ClearInput	OPOS_E_CLOSED	-
1	OPOS_E_NOTCLAIMED	_
	OPOS_E_CLOSED	-
DirectIO	OPOS_E_ILLEGAL	-
	OPOS_E_CLOSED	-
ResetStatistics	OPOS_E_ILLEGAL	-
	OPOS_E_CLOSED	-
RetrieveStatistics	OPOS E ILLEGAL	-
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
	OPOS E NOTCLAIMED	-
BeginInsertion	OPOS_E_DISABLED	-
C	OPOS_E_ILLEGAL	-
	OPOS E TIMEOUT	-
	OPOS E BUSY	-
	OPOS_SUCCESS	-
	OPOS E CLOSED	-
	OPOS E NOTCLAIMED	-
EndInsertion	OPOS_E_DISABLED	-
	OPOS_E_ILLEGAL	-
	OPOS E BUSY	-
	OPOS E EXTENDED	OPOS_EMICR_NOCHECK



Method	ResultCode	ResultCodeExtended
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
	OPOS_E_NOTCLAIMED	-
BeginRemoval	OPOS_E_DISABLED	-
	OPOS_E_ILLEGAL	-
	OPOS_E_TIMEOUT	-
	OPOS_E_BUSY	-
	OPOS_SUCCESS	-
	OPOS_E_CLOSED	-
	OPOS_E_NOTCLAIMED	-
EndRemoval	OPOS_E_DISABLED	-
	OPOS_E_ILLEGAL	-
	OPOS_E_BUSY	-
	OPOS_E_EXTENDED	OPOS_EMICR_CHECK



7. Property List

POS Printer

Property	HSP7000C	HSP7000D	HSP7000U
CapPowerReporting	OPOS_PR_STANDARD	OPOS_PR_STANDARD	OPOS_PR_STANDARD
CapStatisticsReporting	FALSE	FALSE	FALSE
CapUpdateStatistics	FALSE	FALSE	FALSE
CapCharacterSet	PTR_CCS_ASCII	PTR_CCS_ASCII	PTR_CCS_ASCII
CapConcurrentJrnRec	FALSE	FALSE	FALSE
CapConcurrentJrnSlp	FALSE	FALSE	FALSE
CapConcurrentRecSlp	FALSE	FALSE	FALSE
CapCoverSensor	TRUE	TRUE	TRUE
CapMapCharacterSet	TRUE	TRUE	TRUE
CapTransaction	TRUE	TRUE	TRUE
CapJrnPresent	FALSE	FALSE	FALSE
CapJrn2Color	FALSE	FALSE	FALSE
CapJrnBold	FALSE	FALSE	FALSE
CapJrnDhigh	FALSE	FALSE	FALSE
CapJrnDwide	FALSE	FALSE	FALSE
CapJrnDwideDhigh	FALSE	FALSE	FALSE
CapJrnEmptySensor	FALSE	FALSE	FALSE
CapJrnItalic	FALSE	FALSE	FALSE
CapJrnNearEndSensor	FALSE	FALSE	FALSE
CapJrnUnderline	FALSE	FALSE	FALSE
CapJrnCartridgeSensor	0	0	0
CapJrnColor	0	0	0
CapRecPresent	TRUE	TRUE	TRUE
CapRec2Color	FALSE	FALSE	FALSE
CapRecBarCode	TRUE	TRUE	TRUE
CapRecBitmap	TRUE	TRUE	TRUE
CapRecBold	TRUE	TRUE	TRUE
CapRecDhigh	TRUE	TRUE	TRUE
CapRecDwide	TRUE	TRUE	TRUE
CapRecDwideDhigh	TRUE	TRUE	TRUE
CapRecEmptySensor	TRUE	TRUE	TRUE
CapRecItalic	FALSE	FALSE	FALSE
CapRecLeft90	FALSE	FALSE	FALSE
CapRecNearEndSensor	TRUE	TRUE	TRUE
CapRecPapercut	TRUE	TRUE	TRUE
CapRecRight90	FALSE	FALSE	FALSE
CapRecRotate180	TRUE	TRUE	TRUE
CapRecStamp	FALSE	FALSE	FALSE
CapRecUnderline	TRUE	TRUE	TRUE
CapRecCartridgeSensor	0	0	0
CapRecColor	PTR_COLOR_PRIMARY	PTR_COLOR_PRIMARY	PTR_COLOR_PRIMAR
CapRecMarkFeed			
CapSlpPresent	TRUE	TRUE	TRUE
CapSlpFullslip	TRUE	TRUE	TRUE
CapSlp2Color	FALSE	FALSE	FALSE
CapSlpBarCode	FALSE	FALSE	FALSE
CapSlpBitmap	TRUE	TRUE	TRUE
CapSlpBold	TRUE	TRUE	TRUE
CapSlpDhigh CapSlpDwide	TRUE TRUE	TRUE TRUE	TRUE TRUE
CapSlpDwide CapSlpDwideDhigh	TRUE	TRUE	TRUE
CapSlpEmptySensor	TRUE FALSE	TRUE	TRUE
CapSlpItalic		FALSE	FALSE
CapSlpLeft90	FALSE	FALSE	FALSE
CapSlpNearEndSensor	TRUE	TRUE	TRUE
CapSlpRight90	FALSE	FALSE	FALSE
CapSlpRotate180	TRUE	TRUE	TRUE
CapSlpUnderline	TRUE	TRUE	TRUE
CapSlpBothSidesPrint	FALSE	FALSE	FALSE
CapSlpCartridgeSensor	0	0	0
CapSlpColor	PTR COLOR PRIMARY	PTR COLOR PRIMARY	PTR COLOR PRIMAR



Cash Drawer

Property	HSP7000C	HSP7000C(2)	HSP7000D	HSP7000D(2)
CapPowerReporting	OPOS_PR_ STANDARD	OPOS_PR_ STANDARD	OPOS_PR_ STANDARD	OPOS_PR_ STANDARD
CapStatisticsReporting	FALSE	FALSE	FALSE	FALSE
CapUpdateStatistics	FALSE	FALSE	FALSE	FALSE
CapStatus	FALSE (TRUE)	FALSE (TRUE)	FALSE (TRUE)	FALSE (TRUE)
CapStatusMultiDrawerDe- tect	FALSE	FALSE	FALSE	FALSE

Property	HSP7000U	HSP7000U(2)
CapPowerReporting	OPOS_PR_ STANDARD	OPOS_PR_ STANDARD
CapStatisticsReporting	FALSE	FALSE
CapUpdateStatistics	FALSE	FALSE
CapStatus	FALSE (TRUE)	FALSE (TRUE)
CapStatusMultiDrawerDe- tect	FALSE	FALSE

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Property	HSP7000C	HSP7000D	HSP7000U
CapPowerReporting	OPOS_PR_ STANDARD	OPOS_PR_ STANDARD	OPOS_PR_ STANDARD
CapStatisticsReporting	FALSE	FALSE	FALSE
CapUpdateStatistics	FALSE	FALSE	FALSE
CapValidationDevice	TRUE	TRUE	TRUE



8. Guidelines for Printing Documents

- There is no need to set paper margins with this driver. Set all margins to **0**.
- It is recommended to use device fonts supported by this driver. Device fonts make it possible to print at higher speed.

8.1 Notes for Printing via a Serial Interface

When using HSP7000 Windows drivers to print through a serial interface, the printer and printer-port settings must be correctly matched.

The printer settings can be confirmed using the self-printing. For details, refer to the Hardware Manual.

If you are using Windows 2000 SP3 or later, Windows XP, and Windows Vista 32-Bit Edition, you can configure OPOS devices by using the **Start Configuration Utility**. If you are using Windows 2000 SP2 or earlier or Windows Vista 64-Bit Edition, you can use **OPOS Register 2008**. For details, refer to "3.2.1 OPOS" or "4. OPOS Register 2008".

Notes

If the Flow Control for the serial connection is set to Xon/Xoff, clear the Enable bidirectional support check box.

8.2 **Restrictions and Precautions**

• Do not include graphic data (Windows fonts, ruled lines, etc.) on the same line with a device font, as this too may cause skewed print results.



9. Revision History

Rev. No.	Date of Revision	Changes
Rev. 2.0	Jul. 2008	First edition



ELECTRONIC PRODUCTS DIVISION STAR MICRONICS CO., LTD.

536 Nanatsushinya, Shimizu-ku, Shizuoka, 424-0066 Japan Tel: (int+81)-54-347-0112, Fax: (int+81)-54-347-0709

Please access the following URL *http://www.star-m.jp/eng/dl/dl02.htm* for the latest revision of the manual.

OVERSEAS SUBSIDIARY COMPANIES STAR MICRONICS AMERICA, INC.

1150 King Georges Post Road, Edison, NJ 08837-3729 U.S.A. Tel: (int+1)-732-623-5555, Fax: (int+1)-732-623-5590

STAR MICRONICS EUROPE LTD.

Star House, Peregrine Business Park, Gomm Road, High Wycombe, Bucks, HP13 7DL, U.K. Tel: (int+44)-1494-471111, Fax: (int+44)-1494-473333

STAR MICRONICS ASIA LTD.

Rm. 1901-5, 19/F., Enterprise Square Two, 3 Sheung Yuet Road, Kowloon Bay, Hong Kong Tel: (int+852)-2796-2727, Fax: (int+852)-2799-9344