# **SNBCOPOS Software Package**

Introduction

OPOS Software installing steps

**USB Device Driver Installation** 

Configuration tool Usage

**OPOS Programming introduction** 

**OPOS1.14** Compliance List

<u>FAQ</u>

# **SNBCOPOS Software Package**

# **1** Introduction

SNBCOPOS software is the device service software developed according to UPOS1.14. This user manual mainly presents the installation of OPOS software package, the usage of configuration tool and OPOS programming guide. To use SNBCOPOS controls correctly, please read this user manual carefully.

Software package installation guide

Configuration tool usage

OPOS programming guide

# 2 Functions

This installing program applies to install SNBCOPOS software on users' computer;

The configuration tool applies for user's configuration of printer and cashdrawer;

The programming guide applies to instruct the programmer to make new programs based on OPOS system.

# **3 Version information**

# SNBCOPOS Software Package Version: V4.03

History record:

- Support Windows 10.

Date:2016-06-11

# SNBCOPOS Software Package Version: V4.02

History record:

- Add the BK-C310 printer.

### Date:2016-02-04

# **SNBCOPOS Software Package Version: V4.01**

History record:

- Add the path configuration function in silent setup.

Date:2015-12-27

### **SNBCOPOS Software Package Version: V4.0**

History record:

- First edition.

Date:2015-09-30

# 4 Printers

#### BTP-2002NP:

Support printer monitor routine version: V4.05 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BTP-R880NP:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

# BTP-2002CP:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

# BTP-98NP:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

# BTP-R180:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

# BTP-R580:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

#### BTP-R580II:

Support printer monitor routine version: V3.020 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BTP-R580III:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BTP-R980:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BTP-R990:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BK-T680:

Support printer monitor routine version: V1.030 or above;

Supported interfaces: Serial port, USB port and network port.

### BTP-R180II:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

#### BK-T080II:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port and network port.

#### BK-T080III:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port and network port.

#### BK-T180:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port and network port.

# BK-C310:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port and network port.

# BTP-2002CPIV:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

# BTP-2002CPV:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### **BTP-98NPIV:**

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BTP-99NP:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BTP-L580III:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

#### BTP-M180:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BTP-M280:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BTP-M300:

Support printer monitor routine version: V3.050 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BTP-P35:

Support printer monitor routine version: V1.000 or

above; Supported interfaces: USB port and network

port.

# BTP-R356H:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BTP-R582:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BTP-R588:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

#### BTP-R588II:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

# BTP-R681:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BTP-R880NPII:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

# BTP-R880NPIII:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

# BTP-R980III:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BTP-U80:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

# BTP-U80II:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BTP-U80III:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BTP-U81:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

### BTP-U82:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

# BTP-PT800T:

Support printer monitor routine version: V1.000 or above;

Supported interfaces: Serial port, USB port, parallel port and network port.

# **5** Operating system

Support the x86 operation systems as below:

Windows XP

Windows Vista

Windows 7

Windows 8.1

Windows Embedded POSReady 2009

Windows 10

Support the x64 operation systems as below:

Windows XP

Windows Vista

Windows 7

Windows 8.1

Windows Embedded POSReady 2009

Windows 10

# **SNBCOPOS Installation Steps**

1 Installation:

You must install it in the English directory

Step 1: Save SNBCOPOS\_Win V\*.\*.rar in a destination folder:

The released files include:

SETUP.exe;

SETUP\_Silent.exe;

install.bat;

SNBCOPOS Installation Guide.chm;

USBDriver\_x86 file (USB driver file for x86

OS); USBDriver\_x64 file (USB driver file for

x64 OS);

USBPrinterIDSet V1.0(the tool setting USB Printer ID);

Step 2: Run SETUP.exe shown as below:

Setup	
	Welcome to the BYOPOS Setup Wizard
	This will install BYOPOS on your computer.
	It is recommended that you close all other applications before continuing.
	Click Next to continue, or Cancel to exit Setup.
	Next > Cancel



Setup
License Agreement
Please read the following important information before continuing.
Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.
CAREFULLY READ THE FOLLOWING LEGAL AGREEMENT. THE SOFTWARE PROVIDED WITH THIS AGREEMENT (THE "SOFTWARE") IS LICENSED AND ITS USE IS SUBJECT TO THE TERMS AND CONDITIONS BELOW. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, PROMPTLY DESTROY THE SOFTWARE AND DOCUMENTATION.
1. LICENSE GRANT
This software is only to be used with the equipment for which it has be made. SNBC (SHANDONG NEW BEIYANG INFOTECH CO.,LTD) grants to you a non-exclusive, non-transferable right to use the SOFTWARE on the computer(s) that will print to
accept the agreement
I do not accept the agreement
BYUPUS Setup

Read the license agreement of OPOS installation carefully. If you accept it, please click "I accept the agreement ", click "Next";

Setup
Select Destination Location Where should BYOPOS be installed?
Setup will install BYOPOS into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
At least 12.3 MB of free disk space is required.
< Back Next > Cancel

Click "Browse... "button and set the access of OPOS software to be installed, then click "Next "according to the interface prompt;

tup	
Select Components	
Which components should be	installed?
Select the components you wa install. Click Next when you an	ant to install; clear the components you do not want to e ready to continue.
Full	-

Click "Next ";

Setup
Select Additional Tasks Which additional tasks should be performed?
Select the additional tasks you would like Setup to perform while installing BYOPOS, then click Next.
Additional icons:
Create a desktop icon
BYOPOS Setup

Click "Next ";

eady to Install Setup is now ready to begin installing BYOP(	OS on your computer.	<i>a</i>
Click Install to continue with the installation, or change any settings.	or click Back if you want to re	view or
Destination location: C:\Program Files\SNBC\BYOPOS		ŕ
Setup type: Full		E
Selected components: Main Sample OPOSCashDrawer.ocx OPOSPOSPrinter.ocx OposSO.dll ByUSBInt.dll		
•		F

Click "Next ";

Setup
Select Start Menu Folder Where should Setup place the program's shortcuts?
Setup will create the program's shortcuts in the following Start Menu folder.
To continue, click Next. If you would like to select a different folder, click Browse.
BYOPOS Browse
BYUPUS Setup

Click "Next "and wait for the installing course;

Setup	
	Completing the BYOPOS Setup Wizard Setup has finished installing BYOPOS on your computer. The application may be launched by selecting the installed icons. Click Finish to exit Setup.
	Enish

Step 3: Click "Finish "then OPOS software is installed in users' computer.

Note: Run the "install.bat" file can realize the silent installation function, if you want to change the installation path you can edit the "install.bat" file like this: SETUP\_Silent.exe "D:\Program Files\SNBC\BYOPOS".

#### The above operation requires administrator privileges.

# 2 Others:

**2.1** When SNBCOPOS controls is installed on your computer, below location in register table shows the added information of printer or cashdrawer in configuring the printer or cashdrawer:

# Key assignment for printer:

HKEY\_LOCAL\_MACHINE\SOFTWARE\OLEforRetail\ServiceOPOS\POSPrinter\

#### Key assignment for cashdrawer:

HKEY\_LOCAL\_MACHINE\SOFTWARE\OLEforRetail\ServiceOPOS\CashDrawer\

ProgID of printer and cashdrawer respectively is as below:

SOBeiYang.posprinter.1 and SOBeiyangCash.SOByCash.1

Note: The content in the register table can only be viewed but not be modified. (Except LPTAddress of parallel).

**2.2** SNBCOPOS device service software is based on UPOS1.14. When installing SNBCOPOS software, the system default CO (V1.14) offered by UPOS. If CO is available in your system, you don't need to install it.

<b>1</b>		
<u>R</u> ead ID	BTP-R980(U) 2	
<u>S</u> et ID	2	

# How to port Win32 application to OPOS

#### **1 System introduction**

This document describes how to port Win32 application to OPOS. Please notice OPOS cannot be led to OPOS in Win16 or DOS. Furthermore, the routine below is mainly written for Visual C ++ programmer with a certain experience.

If users require developing based on OPOS, they have to install SNBCOPOS completely, while they also need one or more SNBC printer (BTP-2002CP, BTP-R580, BTP-2002NP etc.) online. After installing SNBCOPOS software, first use SNBCOPOS configuration tools (OposConfig.exe) to configure SNBC printer and cashdrawer that can be used after the proper configuration (<u>Refer to "Configuration Tool Usage"</u>).

Notice: In the case of programming based on OPOS, you should refer to Appendix and know SNBCOPOS software compliance for OPOS 1.14.

When programming OPOS, you should first know the basic conception and operation requirement of OPOS:

--OPOS is a standard programming interface for POS peripheral.

--OPOS is also an industrial standard based on Microsoft COM/ActiveX/OLE.

--OPOS can only operate under Win32 system.

--OPOS follows ActiveX standard and offer properties, methods and events to its own complication. OPOS CO cannot be seen in operation. The application could control the peripheral via functioning OPOS CO and setting properties, and return the result to it via methods back value, CO properties and events.

#### 2 Programming introduction

#### 2.1 Adding OPOS CO in project

The first step is to add the Common OPOS Control (OCX) to the control palette. This is done by selecting the menu item Project | Add To Project | Components and Controls shown as below:



Select and open the fold "registered ActiveX Controls "in "components and Controls Gallery "

Components and Controls Gallery	? 🛛
Choose a component to insert into your project: Look in: C Gallery	- <b>E 😚 🖽</b> -
Registered ActiveX Controls	
File name:	
	<u>More Info</u>
 Path to control:	

Then select the CO with the start of "OPOS"quot; in current dialog box and insert this CO;

Componen	ts and Controls Gallery	? 🛛
Choose a co Look in: [	mponent to insert into your project: 7 Registered ActiveX Controls 🛛 🔻 🔁	<b>☆ Ⅲ-</b>
OleInstal	Class ShDrawer Control 1.14.001 [Public, by CRMCS] SPrinter Control 1.14.001 [Public, by CRMCS] Up DTC Short of A Short o	Page Object DTC PageNavbar PageTransitions PDWizard.Deploy PDWizard.DepPkg PDWizard.InetPkç
File <u>n</u> ame:	OPOS POSPrinter Control 1.14.001 (Public, by	
OPOS POSF	rinter Control 1.14.001 [Public, by CRM/MCS]	<u>C</u> lose More Info
Path to contr C:\Program I	ol: Files\SNBC\SNBCOPOS\OPOSP0SPrinter.ocx	

Afterward, VC++ tool shall prompt users if the interface name is correct or not. If correct, click " OK ";

Confirm Classes		?
The checked <u>class(es)</u> will the ActiveX Control. Click o	be generated from on a class name to	ОК
browse or edit its attributes.		Cancel
Class <u>n</u> ame:	Base class:	
Class <u>n</u> ame: COPOSPOSPrinter	Base class CWnd	
Class <u>n</u> ame:  COPOSPOSPrinter Header file:	Base class; CWnd	
Class <u>n</u> ame: COPOSPOSPrinter Header <u>file</u> : OPOSPOSPrinter.h	Base class: CWnd	
Class <u>n</u> äme: COPOSPOSPrinter Header file: OPOSPOSPrinter.h Implementation file:	Base class: CWnd	

The interface class is for applications and OPOS CO. Each method of OPOS CO is corresponding to one method of interface. After configure interface class, an OPOS CO icon shall be added in components and control gallery.



Once the CO icon is added to the palette, the interface class also is created. There are two ways to invoke this CO in your application: the OPOS CO can be dropped into a dialog box, or it can be created dynamically. How to add OPOS CO in a dialog box is shown as below and the dynamic creation of OPOS CO shall not be introduced here:

### 2.2 Adding OPOS CO in a dialog box

The first step is to add the OPOS CO in a dialog box: Simply click OPOS CO icon in the control palette and place it in the dialog box, just as you add a traditional windows control;



The second step is to open Class Wizard and add a member variable for the OPOS CO shown as below:

Select the menus "View/ClassWizard..." and open "MFC ClassWizard "window:



Select Member Variables in "MFC ClassWizard ";

MFC ClassWizar	d				? 🔀
Message Maps	Member Variables	Automation	ActiveX Events	Class Info	
Project:		Class <u>n</u> am	e:		Add Class 👻
Printer		CPrinterD	lg	<b>×</b>	Add Variable
Control IDs:	erDig.h, U.V., APrinterAP	rinterDig.cpp Type	Member		Delete Variable
IDC_BTN_REC1	1				Update <u>Columns</u>
IDC_BTN_REC3 IDC_BTN_REC4 IDC_BTN_REC5 IDC_BTN_REC6 IDC_BTN_REC6 IDC_BTN_REC9 IDC_BTN_REC9 IDC_BTN_REC9 IDC_BUTTON1 IDC_POSPRINT	R				<u>Bind All</u>
Description:				0K	Cancel

Select ID to be added with variable by double clicking or single clicking "Add Variable..." at right, and enter "Add Member Variables " window;

Add Member Variable	? 🛛
Member variable <u>n</u> ame:	ОК
m_Ptr1	Cancel
<u>Category</u> :	
Control	
Variable type:	
COPOSPOSPrinter1	
Description: map to COPOSPOSPrinter1 member	

Add member variable name, sort, type and other parameter in corresponding edit box. Click "OK " and back to below window;

Message Maps Member V	/ariables Automatio	n   ActiveXEvents	Class Info	
Project:	Class <u>r</u>	ame:		Add Class
Printer	CPrint	erDlg	<u> </u>	Add Variable
C:\\Printer\PrinterDlg.h, C:\.	\Printer\PrinterDlg.cpj	<b>)</b>	-	
Control [Ds:	Туре	Member		Delete Variable
IDC_BTN_REC1 IDC_BTN_REC10				Update <u>Column</u>
IDC_BTN_REC3				Princel All
IDC_BIN_REC4 IDC_BIN_REC5				During sea
IDC_BTN_REC6				
IDC_BTN_REC8				
IDC_BTN_REC9				
IDC POSPRINTER	COPOSPO	SPrinter1 m Ptri		
)escription:				

Click "OK "and finish the adding of OPOS CO variable. This member variable is used for visiting OPOS CO methods and properties as the instance of OPOS CO interface type.

#### 2.3 Demonstration

Below instance for calling printer CO is developed based on: COPOSPOSPrinter m\_Ptr1; //printer CO variable LPCTSTR DeviceName ; //define logical device name m\_Ptr1.Open (DeviceName); //connect and initialized device if( m\_Ptr1.GetResultCode() != OPOS\_SUCCESS ) //identify properties value used or back by methods

{

MessageBox ( "This device has not been registered, or cannot use.");

#### }

LONG timeout=3000; //overtime

m\_Ptr1.ClaimDevice(timeout); //exclusive device

if( m\_Ptr1.GetResultCode() != OPOS\_SUCCESS ) //identify properties value used or back by methods

```
{
```

MessageBox("Failed to get the exclusive right for the device.");

#### }

m\_Ptr1.SetDeviceEnabled(TRUE); //enable/disable printer CO

if( m\_Ptr1.GetResultCode() != OPOS\_SUCCESS ) //identify properties value used or back by methods

#### {

MessageBox ( "Now the device is disabled to use.");

#### }

const LONG OPOS\_CH\_INTERNAL = 1; //set internal enquiry mode parameter

const LONG OPOS\_CH\_EXTERNAL = 2; //set external enquiry mode parameter

const LONG OPOS\_CH\_INTERACTIVE = 3; //set interactive enquiry mode parameter

m\_Ptr1.CheckHealth (OPOS\_CH\_INTERACTIVE); //check device status

m\_Ptr1.SetDeviceEnabled (FALSE); //set printer non-enable status

m\_Ptr1.ReleaseDevice(); //release exclusive printer

m\_Ptr1.Close(); //close the device control and used resource

#### 3 Summary

It is very easy to add OPOS CO in Win32 application. The best way is that OCX is added to a dialog box and it communicates with OPOS CO via using member variable in dialog box. In this way VC++ tool can offer users more codes. For example: create and offer necessary codes to transmit events to the application from OPOS CO. If the application doesn't have any usable dialog box to store OPOS CO, users can create a new invisible dialog box to store OPOS CO.

For more information, see:

Sample Program

Application development guide

#### Sample Program

SNBC OPOS offers Sample Program for POS Printer and Cashdrawer in the path of "SNBCOPOS \ Sample".

Sample Program for POS Printer:



### InitDialog :

function	Open device ,initialize printer
Method	Open, ClaimDevice, SetDeviceEnabled, SetMapMode, SetBitmap.

#### Sample Print :

function	Samples print
Method	TransactionPrint, PrintNormal, CutPaper.

### Logo/Barcode:

function	Logo and Barcode print
Method	TransactionPrint, DirectIO, PrintNormal(PTR_S_RECEIPT, ESC+" 1B")(Print the bitmap), PrintBarCode, PrintNormal, CutPaper.

#### Merchant:

function	Supermarket bill	printsample
Method	TransactionPrint,	PrintNormal, CutPaper.

#### Customer:

function	Supermarket bill print sample and Barcode print
Method	TransactionPrint, PrintNormal, PrintBarCode, CutPaper.

#### Print Receipt:

function	Rotate Print sample
Method	GetCapRecPresent, GetCapRecLeft90, SetAsyncMode, RotatePrint, PrintNormal, SetRecLineSpacing, PrintBarCode, CutPaper.

#### ATM Receipt:

function	ATM Print sample
Method	PrintNormal, CutPaper.

### Account Summ:

function	Account Print sample and asynchronous print
Method	SetAsyncMode, RotatePrint, PrintNormal, CutPaper

# DirectIO Sample

function	DirectIO Sample, print data directly
Method	DirectIO, PrintNormal,.

#### PrintMemoryBitmap

function	Print memery bitmap.
Event	SetBinaryConversion, PrintMemoryBitmap.

#### Sample Program for Cashdrawer:



#### InitDialog :

function	Clime device .
Method	Open, ClaimDevice, SetDeviceEnabled.

Open Drawer

function	Open drawer
Method	Open Drawer.

Other Event

function	detect status of device.
Event	OnStatusUpdateEventCashdrawer1

For more information, see:

Programming introduction

Application development guide

# Application development guide

Programming examples of how to use API functions relating to a POS Printer.

#### 1. Printer Stations

The printer model defines three stations:

Journal .....PTR\_S\_JOURNAL

Receipt ......PTR\_S\_RECEIPT

Slip .....PTR\_S\_SLIP

SNBC OPOS supports Receipt station only.

Example:

If OPOSPOSPrinter1.CapRecPresent = True Then

'Receipt functions are available

Else

'Receipt functions are not available

End If

#### 2.MapMode Settings

Holds the mapping mode of the printer. The mapping mode defines the unit of measure used for other properties, such as line heights and line spacings. It has one of the following values:

Value	Meaning
PTR_MM_DOTS	The printer's dot width. This width may be different for each printer station.
PTR_MM_TWIPS	1/1440 of an inch.

PTR_MM_ENGLISH	0.001 inch	
PTR_MM_METRIC	0.01 millimeter.	

Setting this property may also change JrnLineHeight, JrnLineSpacing, JrnLineWidth, RecLineHeight, RecLineSpacing, RecLineWidth, SlpLineHeight, SlpLineSpacing, and SlpLineWidth.

OPOSPOSPrinter1.SetMapMode PTR\_MM\_DOTS .

OPOSPOSPrinter1.SetMapMode PTR\_MM\_TWIPS .

OPOSPOSPrinter1.SetMapMode PTR\_MM\_ENGLISH .

OPOSPOSPrinter1.SetMapMode PTR\_MM\_METRIC .

#### **3.Line Information**

Holds the number of characters that may be printed on a receipt line. Setting this property may also update RecLineWidth, RecLineHeight, and RecLineSpacing, since the character pitch or font may be changed.

RecLineChars .......The number of characters that can be printed on a single line can be browsed or set.

RecLineCharsList...The width of supported characters can be browsed or set.

RecLineHeight ......The height of a single line can be obtained.

 ${\sf RecLineSpacing.....The space between lines can be browsed or set.}$ 

RecLineWidth...... The width of a single line can be obtained.

If changed to a line character width that is less than or equal to the maximum value allowed for the printer, then the width is set to the specified value. If the exact width cannot be supported, then subsequent lines will be printed with a character size that most closely supports the specified characters per line. If the character width is greater than the maximum value allowed for the printer, then an exception is thrown.

#### 4.AsyncMode Property

If true, then the print methods cutPaper, markFeed, printBarCode, printBitmap, printNormal, printTwoNormal, rotatePrint, and transactionPrint will be performed asynchronously.

If false, they will be printed synchronously.

Asynchronous Printing:

OPOSPOSPrinter1.AsyncMode = True

OPOSPOSPrinter1.PrintNormal PTR\_S\_RECEIPT,"Print Data"

If OPOSPOSPrinter1.ResultCode = OPOS\_SUCCESS Then

'Data was sent successfully.

End If

Synchronous printing:

OPOSPOSPrinter1.AsyncMode = False

OPOSPOSPrinter1.PrintNormal PTR\_S\_RECEIPT,"Print Data"

If OPOSPOSPrinter1.ResultCode = OPOS\_SUCCESS Then

'Printing was successful.

End If

#### 5.Setting the Logo

Saves a data string as the top or bottom logo. A logo may then be printed by calling the printNormal, printTwoNormal, or printImmediate method with the print top logo or print bottom logo escape sequence in the print data.

Example:

Dim D1 As String

Dim D2 As String

Dim D3 As String

D1 = "Welcome !" + Chr(13) + Chr(10)

D2 = "SNBC OPOS" + Chr(13) + Chr(10)

D3 = Chr(&H1B) + "|tL" + "Data 1"+ Chr(13) + Chr(10) + Chr(&H1B) + "|bL"

OPOSPOSPrinter1.SetLogo PTR\_L\_TOP,D1

OPOSPOSPrinter1.SetLogo PTR\_L\_BOTTOM,D2

OPOSPOSPrinter1.AsyncMode = False

OPOSPOSPrinter1.PrintNormal PTR\_S\_RECEIPT,D3

The printed results of the above program are as follows.

Welcome ! Data 1 SNBC OPOS

#### 6.Bitmap Printing

Bitmaps can be printed on a station that supports bitmap printing. To use this function, check to see if the printer is able to print bitmaps, and if so send the data.

If OPOSPOSPrinter1.CapRecBitmap = True Then

'Bitmaps can be printed.

Else

'Bitmaps cannot be printed.

End If

There are two ways of printing a bitmap. One way is by using the PrintBitmap method to directly print the bitmap.

Dim RC As Long

RC = OPOSPOSPrinter1.PrintBitmap (PTR\_S\_RECEIPT,

"Bitmap.BMP",	// The .BMP file to be printed
PTR_BM_ASIS,	// Bitmap width.
PTR_BM_CENTER)	//'Bitmap alignment.

If RC = OPOS\_SUCCESS Then

'Data is being sent

Elself RC = OPOS\_E\_FAILURE Then

'There is a problem with the parameters, etc.

```
End If
```

Another way to print a bitmap is to use escape sequences. The SetBitmap method can be used to define the bitmap.

Dim RC As Long

RC = OPOSPOSPrinter1.SetBitmap(1,

//'Bitmap number.

PTR\_S\_RECEIPT,

"Bitmap.BMP", // The .BMP file to be printed.

PTR\_BM\_ASIS,

//'Bitmap width.

PTR\_BM\_CENTER) // Bitmap alignment.

OPOSPOSPrinter1.AsyncMode = False

OPOSPOSPrinter1.PrintNormal PTR\_S\_RECEIPT, Chr(&H1B) + "|1B"

#### 7.Printing Bar Codes

Prints a bar code on the specified printer station. This method is performed synchronously if AsyncMode is false, and asynchronously if AsyncMode is true.If

RotateSpecial indicates that the bar code is to be rotated, then perform the rotation.

Bar codes can be printed on a station if the printer supports bar code printing.

Example1 :

If OPOSPOSPrinter1.CapRecBarCode = True Then

'Bar codes can be printed.

Else

'Bar codes cannot be printed.

End If

printBarCode ( station, data, symbology, heigh,width, alignment:, textPosition ):

fParameter	Value	Description
station	PTR_S_RECEIPT or PTR_S_SLIP	The printer station to be used, SNBC OPOS fixed to PTR_S_RECEIPT
data	Character string to be bar coded.	Character string to be bar coded.
symbology	PTR_BCS_UPCA, PTR_BCS_UPCE, PTR_BCS_JAN8, PTR_BCS_JAN13, PTR_BCS_ITF, PTR_BCS_Codabar, PTR_BCS_Code39, PTR_BCS_Code93, PTR_BCS_Code128,	Bar code symbol type to use. The values on the left are supported by SNBC OPOS.
height	Bar code height. Expressed in the unit of measure given by MapMode.	Bar code height. Expressed in the unit of measure given by MapMode.
width	Bar code width. Expressed in the unit of measure given by MapMode.	Bar code width. Expressed in the unit of measure given by MapMode.
alignment	PTR_BC_LEFT, PTR_BC_CENTER, PTR_BC_RIGHT	Placement of the bar code. See values below.
textPosition	PTR_BC_TEXT_NONE ,PTR_BC_TEXT_ABOVE, PTR_BC_TEXT_BELOW	Placement of the readable character string.

Example2 :

Dim RC As Long

RC = OPOSPOSPrinter1.PrintBarCode (PTR\_S\_RECEIPT, "12345678", PTR\_BCS\_JAN8, 150, 150, PTR\_BC\_LEFT, PTR\_BC\_TEXT\_BELOW)

If RC = OPOS\_SUCCESS Then

'Bar codeis print OK

Elself RC = OPOS\_E\_FAILURE Then

'There is a problem with the bar code, etc.

End If

#### **8.Rotated Printing**

Printed data can be turned 90-degree or 180-degree with the method of rotatePrint .

rotatePrint (station, rotation):

fParameter	Value	Description
station	PTR_S_RECEIPT or PTR_S_SLIP	Direction of rotation, SNBC OPOS fixed to PTR_S_RECEIPT
rotation	PTR_RP_RIGHT90, PTR_RP_LEFT90, PTR_RP_ROTATE180, PTR_RP_BARCODE, PTR_RP_BITMAP, PTR_RP_NORMAL	Refer to UPOS Specifications.

Example:

If OPOSPOSPrinter1.CapRecRight90 = True Then

'90° right printing is possible.

Else

'90° right printing is not possible.

End If

Dim RC As Long

RC = OPOSPOSPrinter1.RotatePrint (PTR\_S\_RECEIPT, PTR\_RP\_RIGHT90)

If RC = OPOS\_SUCCESS Then

OPOSPOSPrinter1.PrintNormal PTR\_S\_RECEIPT, "Right 90 Printing." + Chr(13) + Chr(10)+ "Welcome !" + Chr(13) + Chr(10) + "SNBC OPOS" + Chr(13) + Chr(10)

RC = OPOSPOSPrinter1.RotatePrint (PTR\_S\_RECEIPT, PTR\_RP\_NORMAL)

End If

#### 9.Immediate Printing

This method tries to print its data immediately- that is, as the very next printer operation. It may be called when asynchronous output is outstanding. This method is primarily intended for use in exception conditions when asynchronous output is outstanding, such as within an error event handler.

printImmediate ( station, data ):

fParameter	Value	Description
station	PTR_S_JOURNAL, PTR_S_RECEIPT or PTR_S_SLIP.	The printer station to be used, SNBC OPOS fixed to PTR_S_RECEIPT
data	data be printed.	Refer to UPOS Specifications.

Example:

Dim RC As Long

RC = OPOSPOSPrinter1.Printlmmediate (PTR S RECEIPT, Chr(13)+ Chr(10)+ "Welcome !" + Chr(13) + Chr(10) + "SNBC OPOS" + Chr(13) + Chr(10))

If RC = OPOS\_SUCCESS Then

'Data printed successfully.

Elself RC = OPOS\_E\_ILLEGAL Then

'Specified station does not exist, etc.

End If

#### **10.Transaction Printing**

Enters or exits transaction mode. If control is PTR\_TP\_TRANSACTION, then transaction mode is entered. Subsequent calls to printNormal, cutPaper, rotatePrint, printBarCode, and

printBitmap will buffer the print data (either at the printer or the Service, depending on the printer capabilities) until transactionPrint is called with the control parameter set to PTR\_TP\_NORMAL.

If control is PTR\_TP\_NORMAL, then transaction mode is exited. If some data was buffered by calls to the methods printNormal, cutPaper, rotatePrint, printBarCode, and printBitmap, then the buffered data is printed. The entire transaction is treated as one message. This method is performed synchronously if AsyncMode is false, and asynchronously if AsyncMode is true.

transactionPrint (station, control)

fParameter	Value	Description
station	PTR_S_JOURNAL, PTR_S_RECEIPT or PTR_S_SLIP.	The printer station to be used, SNBC OPOS fixed to PTR_S_RECEIPT
control	PTR_TP_TRANSACTION, PTR_TP_NORMAL	Begin a transaction and End a transaction by printing the buffered data.

Example:

OPOSPOSPrinter1.AsyncMode = True

OPOSPOSPrinter1.PrintImmediate (PTR\_S\_RECEIPT,Chr(13)+ Chr(10)+"enter Trasanction model, printNormal, cutPaper, rotatePrint, printBarCode, and printBitmap will only buffer the data" + Chr(13) + Chr(10))

OPOSPOSPrinter1.TransactionPrint(PTR\_S\_RECEIPT,PTR\_TP\_TRANSACTION)

OPOSPOSPrinter1.PrintNormal(PTR\_S\_RECEIPT,"Welcome to SNBC !"+Chr(13) + Chr(10))

OPOSPOSPrinter1.RotatePrint(PTR\_S\_RECEIPT,PTR\_RP\_ROTATE180)

OPOSPOSPrinter1.PrintNormal(PTR\_S\_RECEIPT,"Welcome to SNBC !"+Chr(13) + Chr(10))

OPOSPOSPrinter1.SetBitmap(1,PTR\_S\_RECEIPT,"BMP.bmp",PTR\_BM\_ASIS,PTR\_BM\_LEFT);

OPOSPOSPrinter1.PrintNormal(PTR\_S\_RECEIPT,ESC+"|1B")

OPOSPOSPrinter1.TransactionPrint(PTR\_S\_RECEIPT,PTR\_TP\_NORMAL);

#### **11.Paper Cutting**

Cuts the receipt paper, This method is performed synchronously if AsyncMode is false, and asynchronously if AsyncMode is true. Many printers with paper cut capability can perform both full and partial cuts.

cutPaper (percentage)

percentage: The percentage of paper to cut, if percentage equals to 100, printer perform Full cut, if percentage less than 100, printers perform partial cuts.



OPOSPOSPrinter1.PrintNormal PTR\_S\_RECEIPT, Chr(&H1B) + "|100P"

#### 12.MarkFeed Printing

This method is used to utilize the printer's mark sensor for receipt paper. This method is performed synchronously if AsyncMode is false, and asynchronously if AsyncMode is true.

markFeed (type)

The type parameter indicates the type of mark sensed paper handling. Valid values are:

Value	Description
PTR_MF_TO_TAKEUP	Feed the Mark Sensed paper to the paper take-up position.
PTR_MF_TO_CUTTER	Feed the Mark Sensed paper to the auto cutter cutting position.
PTR_MF_TO_CURRENT_TOF	Feed the Mark Sensed paper to the present paper's top of form. (Reverse feed, SNBC OPOS don't support.)
PTR_MF_TO_NEXT_TOF	Feed the Mark Sensed paper to the next paper's top of form.

Example :

OPOSPOSPrinter1.AsyncMode = True

OPOSPOSPrinter1.PrintImmediate (PTR\_S\_RECEIPT,Chr(13)+Chr(10)+"Marker feed Printing!"+Chr(13)+Chr(10))

OPOSPOSPrinter1.PrintNormal(PTR\_S\_RECEIPT,Chr(13)+ Chr(10)+" Welcome to SNBC! "+Chr(13) + Chr(10))

OPOSPOSPrinter1.MarkFeed(PTR\_MF\_TO\_CUTTER)

OPOSPOSPrinter1.CutPaper 100

#### 13. Checking the Printer State

The state of the printer can be checked through properties supported by the printer as well as be checked by firing a StatusUpdateEvent.

Example 1:

If OPOSPOSPrinter1.CoverOpen = True Then

Cover is open

End If

```
Example 2:
```

Private Sub OPOSPOSPrinter1\_StatusUpdateEvent (ByVal Data As Long)

If Data = PTR\_SUE\_COVER\_OPEN Then

Cover is open

End If

End Sub

StatusUpdateEvent: upos::events::StatusUpdateEvent

Notifies the application that a printer has had an operation status change. This event contains the following attribute (Supported by SNBC OPOS) :

Value	Description
PTR_SUE_COVER_OPEN	Printer cover is open.
PTR_SUE_COVER_OK	Printer cover is closed.
PTR_SUE_REC_EMPTY	No receipt paper.
PTR_SUE_REC_NEAREMPTY	Receipt paper is low.
PTR_SUE_REC_PAPEROK	Receipt paper is ready.
OPOS_SUE_POWER_ONLINE	Receipt paper is powered on.
OPOS_SUE_POWER_OFF	Receipt paper is powered off.
PTR_SUE_IDLE	CO State is IDLE

### 14.Color Printing

As referring to the CapRec2Color property, supported colors can be confirmed. After confirming the available colors, color printing can be done using ESC |#rC or ESC |rC.

Example:

If OPOSPOSPrinter1.CapRec2Color = True then

OPOSPOSPrinter1.AsyncMode = False

 $OPOSPOSPrinter 1. PrintNormal (PTR\_S\_RECEIPT, Chr(\&H1B) + "|2rC" + "Color Printint Test" + Chr(13) + Chr(10) + "Welcome to SNBC" + Chr(13) + Chr(10)) + (Chr(10) + Chr(10)) + (Chr(10) + Chr(10) + Chr(10)) + (Chr(10) + Chr(10) + Chr(10)) + (Chr(10) + Chr(10) + (Chr(10) + Chr(10)) + (Chr(10) + Chr(10)) + (Chr(10) + (Chr(1$ 

End If

For more information, see:

Sample Program

Programming introduction

# **OPOS1.14** Compliance List

#### 1 General properties, methods and events

Properties				
Name	Version	Туре	Access	Compliance
AutoDisable	1.2	Boolean	R/W	Fixed As False
BinaryConversion	1.2	Long	R/W	OK
CapCompareFirmwareVersion	1.9	boolean	R	Unsupported
CapPowerReporting	1.3	Long	R	OK
CapStatisticsReporting	1.8	boolean	R	Unsupported
CapUpdateFirmware	1.9	boolean	R	Unsupported
CapUpdateStatistics	1.8	boolean	R	Unsupported
CheckHealthText	1.0	String	R	OK
Claimed	1.0	Boolean	R	OK
DataCount	1.2	Long	R	Unsupported
DataEventEnabled	1.0	Boolean	R/W	Fixed As False
DeviceEnabled	1.0	Boolean	R/W	OK
FreezeEvents	1.0	Boolean	R/W	OK
OpenResult	1.5	Long	R	OK
OutputID	1.0	Long	R	OK
PowerNotify	1.3	Long	R/W	OK
PowerState	1.3	Long	R	OK
PhysicalDeviceDescription	1.0	Long	R	ОК
PhysicalDeviceName	1.0	Long	R	OK
ResultCode	1.0	Long	R	OK
ResultCodeExtended	1.0	Long	R	OK
State	1.0	Long	R	OK
ControlObjectDescription	1.0	String	R	OK
ControlObjectVersion	1.0	Long	R	OK
ServiceObjectDescription	1.0	String	R	OK
ServiceObjectVersion	1.0	Long	R	OK
DeviceDescription	1.0	String	R	OK

DeviceName	1.0 Strin	g R OK
Methods		
Name	Version	Compliance
Open	1.0	OK
Close	1.0	OK
ClaimDevice	1.0	OK
ReleaseDevice	1.0	OK
CheckHealth	1.0	OK
ClearInput	1.0	Unsupported
ClearOutput	1.0	OK
CompareFirmwareVersion	1.9	Unsupported
DirectIO	1.0	OK
ResetStatistics	1.10	Unsupported
RetrieveStatistics	1.8	Unsupported
UpdateFirmware	1.9	Unsupported
updateStatistics	1.10	Unsupported
Events		
Name	Version	Compliance
DataEvent	1.0	Unsupported
DirectIOEvent	1.0	Unsupported
ErrorEvent	1.0	OK
OutputCompleteEvent	1.0	OK
StatusUpdateEvent	1.0	OK

2 Printer special properties, methods and events

2.1 Special properties

Name	Version	Туре	Access	MayUseAfter	Compliance
AsyncMode	1.0	Boolean	R/W	Open	OK
CoverOpen	1.0	Boolean	R	Open,Claim,&Enable	OK
ErrorLevel	1.1	Long	R	Open	OK
ErrorStation	1.0	Long	R	Open	OK
ErrorString	1.1	String	R	Open	Fixed Blank String
FontTypefaceList	1.1	String	R	Open	Fixed Blank String
FlagWhenIdle	1.0	Boolean	R/W	Open	OK
MapCharacterSet	1.7	Boolean	R/W	Open	OK
MapMode	1.0	Long	R/W	Open	OK
RotateSpecial	1.1	Long	R/W	Open	OK
JrnLineChars	1.0	Long	R/W	Open,Claim,&Enable	Fixed 0
JrnLineCharsList	1.0	String	R	Open	Fixed Blank String
JrnLineHeight	1.0	Long	R/W	Open,Claim,&Enable	Fixed 0
JrnLineSpacing	1.0	Long	R/W	Open,Claim,&Enable	Fixed 0
JrnLineWidth	1.0	Long	R	Open,Claim,&Enable	Fixed 0
JrnLetterQuality	1.0	Boolean	R/W	Open,Claim,&Enable	Fixed As False
JrnEmpty	1.0	Boolean	R	Open,Claim,&Enable	Fixed As False
JrnNearEnd	1.0	Boolean	R	Open,Claim,&Enable	Fixed As False
JrnCartridgeState	1.5	Long	R	Open,Claim,&Enable	Fixed 0
JrnCurrentCartridge	1.5	Long	R/W	Open,Claim,&Enable	
RecLineCharsList	1.0	String	R	Open	<u>42</u>
RecLineChars	1.0	long	R/W	Open	42
RecLineHeight	1.0	Long	R/W	Open,Claim,&Enable	Unsupported
RecLineSpacing	1.0	Long	R/W	Open,Claim,&Enable	UK OK
RecLineWidth	1.0	Long	R	Open,Claim,&Enable	OK Una surge a state d
RecLetterQuality	1.0	Boolean	R/W	Open,Claim,&Enable	
Recempty	1.0	Boolean	R	Open, Claim, & Enable	
Rechearend	1.0	Boolean	ĸ	Open,Claim,&Enable	UK Fixed 47
RecSidewaysMaxLines	1.0	Long	R	Open,Claim,&Enable	FIXED 17
				-	(Unsupported)
RecSidewaysMaxChars	1.0	Long	R	Open,Claim,&Enable	(Unsupported)
Pool inosToPaporCut	1.0	Long	D	Opon Claim & Enable	
RecBarCodeRotationList	1.0	String	R	Open	"0 180 P90   90"
RecBitmanRotationList	1.1	String	R	Open	"0,180,180,230 "0,180 P90 L90"
RecCartridgeState	1.7	Long	R	Open Claim & Enable	Fixed 0
RecCurrentCartridge	1.5	Long	R/W	Open Claim & Enable	Fixed 0
CanCharacterSet	1.0	Long	R	Open	Fixed 0
CapConcurrentJrnRec	1.0	Boolean	R	Open	Fixed As False
CapConcurrent.IrnSin	1.0	Boolean	R	Open	Fixed As False
	1.9	Boolean	R	Open	Unsupported
CapConcurrentRecSlp	1.0	Boolean	R	Open	Fixed As False
CapCoverSensor	1.0	Boolean	R	Open	OK
CapTransaction	1.1	Boolean	R	Open	OK
CapJrnPresent	1.0	Boolean	R	Open	Fixed As False
CapJrn2Color	1.0	Boolean	R	Open	Fixed As False
CapJrnBold	1.0	Boolean	R	Open	Fixed As False
CapJrnCartridgeSensor	1.5	Long	R	Open	Fixed As False
CapJrnColor	1.5	Long	R	Open	Fixed As False
CapJrnDhigh	1.0	Boolean	R	Open	Fixed As False
CapJrnDwide	1.0	Boolean	R	Open	Fixed As False
CapJrnDwideDhigh	1.0	Boolean	R	Open	Fixed As False
CapJrnEmptySensor	1.0	Boolean	R	Open	Fixed As False
CapJrnItalic	1.0	Boolean	R	Open	Fixed As False
CapJrnNearEndSensor	1.0	Boolean	R	Open	Fixed As False
CapJrnUnderline	1.0	Boolean	R	Open	Fixed As False
CapRec2Color	1.0	Boolean	R	Open	Fixed As False
CapRecBarCode	1.0	Boolean	R	Open	Fixed As True
CapRecBitmap	1.0	Boolean	R	Open	OK
CapRecBold	1.0	Boolean	R	Open	OK
CapRecCartridgeSensor	1.5	Boolean	R	Open	Fixed As False
CapRecColor	1.5	Boolean	R	Open	Fixed As False
CapRecDhigh	1.0	Boolean	R	Open	OK
CapRecDwide	1.0	Boolean	R	Open	OK
CapRecDwideDhigh	1.0	Boolean	R	Open	OK
CapRecEmptySensor	1.0	Boolean	R	Open	OK

CapRecItalic	1.0	Boolean	R	Open	Fixed As False
CapRecLeft90	1.0	Boolean	R	Open	OK
CapRecMarkFeed	1.5	Boolean	R	Open	Fixed As False
CapRecNearEndSensor	1.0	Boolean	R	Open	OK
CapRecPapeMode	1.9	Boolean	R	Open	Unsupported
CapRecPapercut	1.0	Boolean	R	Open	OK
CapRecRight90	1.0	Boolean	R	Open	ОК
CapRecRotate180	1.0	Boolean	R	Open	ОК
CapRecRuledLine	1.13	Long	R	Open	Unsupported
CapRecStamp	1.0	Boolean	R	Open	Fixed As False
CapRecUnderline	1.0	Boolean	R	Open	ОК
CapRecPresent	1.0	Boolean	R	Open	ОК
CapSlpPresent	1.0	Boolean	R	Open	Fixed As False
CapSlpFullslip	1.0	Boolean	R	Open	Fixed As False
CapSlp2Color	1.0	Boolean	R	Open	Fixed As False
CapSlpBarCode	1.0	Boolean	R	Open	Fixed As False
CapSlpBitmap	1.0	Boolean	R	Open	Fixed As False
CapSlpBold	1.0	Boolean	R	Open	Fixed As False
CapSlpBothSidesPrint	1.5	Boolean	R	Open	Fixed As False
CapSlpCartridgeSensor	1.5	Boolean	R	Open	Fixed As False
CapSlpColor	1.5	Long	R	Open	Fixed As False
CapSlpDhigh	1.0	Boolean	R	Open	Fixed As False
CapSlpDwide	1.0	Boolean	R	Open	Fixed As False
CapSlpDwideDhigh	1.0	Boolean	R	Open	Fixed As False
CapSIpEmptySensor	1.0	Boolean	R	Open	Fixed As False
CapSipitalic	1.0	Boolean	R	Open	Fixed As False
CapSlpLeft90	1.0	Boolean	R	Open	Fixed As False
	1.0	Boolean	R	Open	Fixed As False
	1.9	Boolean	R	Open	Unsupported
CapSlpRight90	1.0	Boolean	R	Open	Fixed As False
CapSinRotate180	1.0	Boolean	R	Open	Fixed As False
	1.13	Long	R	Open	Unsupported
	1.0	Boolean	R	Open	Fixed As False
CartridgeNotify	1.5	Long	R/W	Open	Fixed As False
CharacterSet	1.0	Long	R/W	Open.Claim.&Enable	CharacterSetList.
			_	-	"101.102.104.105.106.107
CharacterSetList	1.0	String	R	Open	437.850.858.860.863.865 .998.999"
PageModeArea	1.9	Long	R	Open	Unsupported
PageModeDescriptor	1.9	Long	R	Open	Unsupported
PageModeHorizontalPosition	1.9	Long	R/W	Open	Unsupported
PageModePrintArea	1.9	Long	R/W	Open	Unsupported
PageModePrintDirection	1.9	Long	R/W	Open	Unsupported
PageModeStation	1.9	Long	R/W	Open	Unsupported
PageModeVerticalPosition	1.9	Long	R/W	Open	Unsupported
SlpLineChars	1.0	Long	R/W	Open,Claim,&Enable	Unsupported
SlpLineCharsList	1.0	String	R	Open	Unsupported
SlpLineHeight	1.0	Long	R/W	Open,Claim,&Enable	Unsupported
SlpLineSpacing	1.0	Long	R/W	Open,Claim,&Enable	Unsupported
SlpLineWidth	1.0	Long	R	Open.Claim.&Enable	Unsupported
SlpLetterQuality	1.0	Boolean	R/W	Open.Claim.&Enable	Unsupported
SIpEmpty	1.0	Boolean	R	Open.Claim.&Enable	Unsupported
SlpNearEnd	1.0	Boolean	R	Open.Claim.&Enable	Unsupported
SIpSidewaysMaxLines	1.0	Lona	R	Open.Claim.&Enable	Unsupported
SlpSidewaysMaxChars	1.0	Long	R	Open,Claim.&Enable	Unsupported
SlpMaxLines	1.0	Lona	R	Open,Claim.&Enable	Unsupported
SlpLinesNearEndToEnd	1.0	Lona	R	Open,Claim.&Enable	Unsupported
SlpBarCodeRotationList	1.1	String	R	Open	Unsupported
SlpBitmapRotationList	1.7	Strina	R	Open	Unsupported
SlpPrintSide	1.5	Lona	R	Open,Claim.&Enable	Unsupported
SlpCartridgeState	1.5	Lona	R	Open,Claim.&Enable	Unsupported
SlpCurrentCartridge	1.5	Lona	R/W	Open,Claim.&Enable	Unsupported
				, , , ,	

#### 2.2 Special methods

Name	Version	MayUseAfter	Compliance
PrintNormal	1.0	Open,Claim,&Enable	OK
PrintTwoNormal	1.0	Open,Claim,&Enable	Unsupported

PrintImmediate	1.0	Open,Claim,&Enable	ок
BeginInsertion	1.0	Open,Claim,&Enable	Unsupported
EndInsertion	1.0	Open,Claim,&Enable	Unsupported
BeginRemoval	1.0	Open,Claim,&Enable	Unsupported
EndRemoval	1.0	Open,Claim,&Enable	Unsupported
CutPaper	1.0	Open,Claim,&Enable	OK
RotatePrint	1.0	Open,Claim,&Enable	OK
PrintBarCode	1.0	Open,Claim,&Enable	OK
PrintBitmap	1.0	Open,Claim,&Enable	OK
TransactionPrint	1.1	Open,Claim,&Enable	OK
ValidateData	1.1	Open,Claim,&Enable	Unsupported
SetBitmap	1.0	Open,Claim,&Enable	OK
SetLogo	1.0	Open,Claim,&Enable	OK
ChangePrintSide	1.5	Open,Claim,&Enable	Unsupported
CleraPrintArea	1.9	Open,Claim,&Enable	Unsupported
DrawRuledLine	1.13	Open,Claim,&Enable	Unsupported
PageModePrint	1.9	Open,Claim,&Enable	Unsupported
PrintMemoryBitmap	1.10	Open,Claim,&Enable	OK
MarkFeed	1.5	Open,Claim,&Enable	Unsupported

3 Special properties and events of cashdrawer

Name	Version	MayUseAfter	Compliance
Properties			
CapStatus	1.0	Open	OK
CapStatusMultiDrawerDetect	1.5	Open	Unsupported
DrawerOpened	1.0	Open	OK
Events			
DirectIOEvent	1.0	Open	Unsupported
StatusUpdateEvent	1.0	Open	OK
Methods			
OpenDrawer	1.0	Open-Enabled	OK
WaitForDrawerClose	1.0	Open-Enabled	OK

**4 Printer Errors** 

ResultCodeExtended	Meanings	Remedy
OPOS_SUCCESS	Operation successful.	OK
OPOS_E_CLOSED	Not opened.	Open
OPOS_E_CLAIMED	Another instance is claimed on the same device.	Release the device that is making a claim in another process.
OPOS E NOTCLAIMED	Not claimed.	Claim
OPOS_E_NOSERVICE	No service.	Check the device name of the parameter of the Open method. Install the software again.
OPOS_E_DISABLED	DeviceEnabled is FALSE.	Set DeviceEnabled to TRUE.
OPOS_E_ILLEGAL	An illegal parameter,function is specified.	Execute the method using normal parameter or set the properties. Check the status of the printer, and place it in the status in which commands can be executed.
OPOS_E_NOHARDWARE	Power is OFF or unconnected.	Turn ON the power. Check the connections.
OPOS_E_OFFLINE	The printer is offline.	Make online.
OPOS_E_NOEXIST	File does not exist. Registry information does not exist.	Check the filename and the name of registry key. Install and register the software again.
OPOS_E_FAILURE	Hardware failure.	In the case of a recoverable error, eliminate the reason for the error, and then use the ESC/POS command to recover the error, or execute ClearOutput. If this error occurs frequently, please contact the hardware manufacturer.
	The current Service Object state does not allow this	Wait for the asynchronous output to

OPOS_E_BUSY	request. For example, if asynchronous output is in progress, certain methods are not allowed.	finish, and then execute the processing again.
OPOS_EPTR_COVER_OPEN	Cover is opened.	Close the cover.
OPOS_EPTR_REC_EMPTY	Receipt station is out of paper.	Load receipt paper.

#### FAQ

#### A.1 The printout of serial printer is messy code, how to settle it?

The main reasons caused messy code is that no correct serial parameter is configured. First print the self-test page to confirm serial parameter of the current printer (refer to the attachment "Pint self-test page "); Based on the serial parameter indicated in the self-test page, you can ensure serial printer runs normally.

#### A.2 How to connect two or more than two units of USB printer having same internal name to the host?

Because USB print is identified via internal name of the printer, Maybe that two units or over two units of the printer having same name are connected to the host, so if you want to connect two units or over two units of the printer having same name into the system. You'd better run the USBPrinterIDSet EXE program in the USBPrinterIDSet V1.0 folder first, and you need to set the two units or over two units of the printer with different ID.(refer to the attachment "Connect two or more than two units of USB printer" );

#### A.3 How to use the configuration tool and SNBCOPOS SO for a non-administrator?

In using the configuration tool, the operator as an administrator can be allowed to log in for the add, change and deletion of printer, serial or parallel number settings If you operate as a nonadministrator, only the added printer or cashdrawer could be viewed without any other operation.

In using SNBCOPOS SO, neither an administrator nor a non-administrator for logging in doesn't affect the functions of the added printer or cashdrawer as the print, query and etc.

#### A.4 Why Cannot Find a new Device When Connecting with USB I/F Printer

The causes that result the failure to find a new device are shown as below:

- Check if the driver of USB I/F printer is installed;
- Check if only one USB I/F printer is online;
   Check if the printer type selected in ConfigureTool is same with the USB I/F printer connected already;
- Check if the quantity of added USB I/F printers reaches 8 units. If 8 units of USB I/F printer are configured in the tool, please confirm if all of them are still in use; If yes, a new USB I/F printer cannot be added, otherwise please delete the USB port not in use in configuration tool.

#### A.5 When I use parallel port, the Printer can't print using OPOS, and the Printer can print after I exit OPOS.

Parallel communication exist the problem of port occupied. Check the "Printers and Faxes" in the Start menu. The device driver application port are consistent with parallel communications port of the OPOS. And if the same phenomenon would be a problem. At this point need to modify the device drivers for other specified port, release the parallel resources, then call the OPOS to communicate again, that will be back to normal.

#### A.6 Why cannot run my program in X64 OS

The causes that result the failure to run program in X64 OS are shown as below:

- Check if your program is a 32-bit program. The OPOS can run in X64 OS, but it can't run 64-bit Program;
  Check if the driver of USB is USBDriver\_x64;

#### A.7 Different Version OPOS reinstall

If the version installing is higher than the version installed, you can overwrite install. If the version installing is lower than the version installed, you'd better uninstall the higher version, then install the lower version.

#### A.8 How to call DirectIO interface?

Set the first parameter Command is 990. Use this command only when sending an ESC/POS command to the device.

#### **Print Self-test Page**

#### The way to print a self-test page:

1) Connect with printer power. If the printer is already turned on, please first turn off the power;

2) Press down paper feed button of printer and also turn on the power, then the printer shall output a self-test page.

3) Press paper feed button to continue the print for further information or turn off power to end the print.

#### Modify parallel address

#### Steps:(take Windows XP as an example)

Step 1: Select" My computer", and click right button to select" Properties", then open the system properties dialogue box shown as below:

System Properties
System Restore Automatic Updates Remote
General Computer Name Hardware Advanced
Add Hardware Wizard
The Add Hardware Wizard helps you install hardware.
Add Hardware Wizard
Device Manager
The Device Manager lists all the hardware devices installed on your computer. Use the Device Manager to change the properties of any device.
Driver Signing Device Manager
Hardware Profiles
Hardware profiles provide a way for you to set up and store different hardware configurations.
Hardware Profiles
OK Cancel Apply

Step 2: select" Hardware"-> "Device Manager", then open" Device Manager" dialogue box;



Step 3: In "Device Manager" click " Ports( COM and LPT )" in tree controls to select parallel name added by the configuration tool (Refer to "Add printer controls supporting serial or parallel "), and then click right button to select "Properties" for opening the dialogue box of the related parallel shown as below;

3eneral	Port Settings D	river Resources
Z	NetMos PCI ECF	<sup>p</sup> Parallel Port (LPT2)
	Device type:	Ports (COM & LPT)
	Manufacturer:	NetMos Technology
	Location:	Location 6
Devid This	ce status device is working (	properly.
Devic This If yo start	ce status device is working ; u are having proble the troubleshooter.	property.
Devic	ce status device is working j u are having proble the troubleshooter.	property.
Device	ce status device is working ; u are having proble the troubleshooter usage:	property. ms with this device, click Troubleshoot to Troubleshoot

Step 4: Open " Resources " page and check" I/O Range "; If many values are available, the first value prevails. The initial address of this parallel is recorded as below data of "BC00";

ieneral Port Setti	ngs Driver Resources	
Resource settings	PCI ECP Parallel Port (LPT2)	
Resource type	Setting	
I/O Range I/O Range	BC00 - BC07 C000 - C007	
Setting based on:	[	<u>~</u>
	Use automatic settings	Change Setting
Lonflicting device No conflicts.	list:	<u>^</u>
	ſ	OK Cance

Step 5: Open the registry editor and find the corresponding printer or cashdrawer, of which the location is shown as:

HKEY\_LOCAL\_MACHINE\SOFTWARE\OLEforRetail\ServiceOPOS\POSPrinter\

HKEY\_LOCAL\_MACHINE\SOFTWARE\OLEforRetail\ServiceOPOS\CashDrawer\(Shown as below)



Step 6: In the corresponding printer or cashdrawer data, you can find LPTAddress and double click this data, then it shall be changed as the parallel address recorded in Step 4;



🕯 Registry Editor 📃 📃					
File Edit View Favorites Help					
🖃 进 My Computer	Name	Туре	Data		
HEY_CLASES_ROOT     HEY_CLASES_ROOT     HEY_CLARENT_USER     HEY_LOCAL_MACHINE     HEY_LOCAL_MACHINE     SolfWARE     SolfWARE     SolfWARE     SolfWARE     SolfWARE     Genetas     Detrias     Detrias	(Default) 國Bouchete 國Belangth 國Description 國Handshake ALDA 國社Anddress 國Parky ADPA 對Dest 國國的發展 對Dest 國國的發展	REG_SZ REG_DWORD REG_SZ REG_DWORD REG_SZ REG_DWORD REG_SZ REG_DWORD REG_SZ REG_DWORD REG_SZ	SOBeVang.posprinter.1 0x00004b00 (19200) 0x00000000 (3) Belvang OPOS ServiceObject, CopyRight (C 0x0000000 (0) by5 0x00000000 (0) LPT2 0x0000000 (1) 0x000001 (1) 0x000001388 (5000)	) We	
HKEY_CURRENT_CONFIG	<			)	