POS Machine Connection Guide

For

HVR Server v10.x

POS-DVR surveillance system is a professional surveillance integrated with POS system. By bringing video and POS transaction data together, the POS-DVR surveillance system provides visual text information to reduce shrinkage and prevent asset from losing.

HVR System can integrate any POS devices that send plain text data based on ASCII code through serial port (RS-232-C) or network (TCP/IP).

When text information was sent to HVR through COM port or network, user can set filter rule according to the data information. After correct settings, HVR will overlay text information over the video image.

1. Connection

HVR System supports two methods to receive the data from POS system: Serial port and network. Result from that, POS system can send data through serial port or network directly, or the combination of them by using converter.

1.1 Direct COM port connection

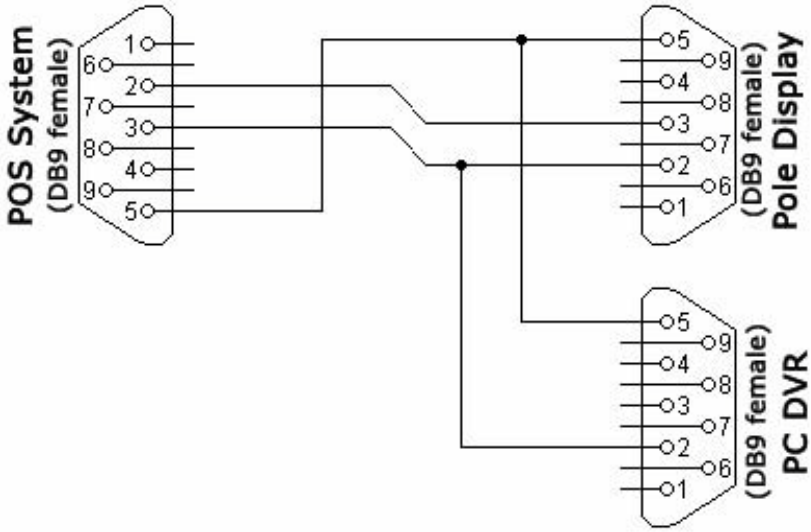
For direct COM port connection, we recommend user send the data for pole display to our POS system, since it is real time and will not send much data at a time, which will cause the difficulty to read the fast scroll text over the video. And user should use cross-line cable to connect two ends.

If the POS system support copying the data for pole display to another COM port, user can connect that COM port with the HVR directly.

If the POS system does not support copying the data for pole display to another COM port, user can make a spy monitor cable to divide the data from POS to pole display (RS-232-C serial port connection) to two terminals, one for pole display and the other for HVR.

Note: before you make the DIY spy cable, please consult your POS supplier to be sure the pin definition of the RS-232-C cable between POS System and Pole Display.

A. Half duplex RS232 spy cable without handshaking

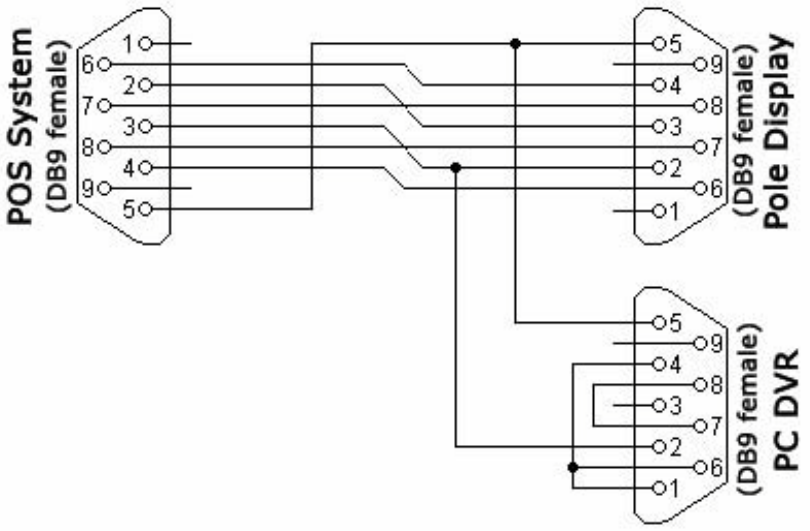


* Since we just need the data from POS system to Pole display, so we just connect the pin 3(Transmit data) of POS system with pin 2 (Receive data) of HVR. Next is the same.

HVR	Function
3 (POS system) 2*	Tx Rx
5 (POS system) 5	Signal Ground

B. Half duplex RS232 spy cable with handshaking

Our HVR does not need any flow controls for direct COM port, including software and hardware flow control. If the POS system need flow control, user should do some changes as below:



For more detailed information, please refer to: http://www.lammertbies.nl/comm/cable/RS-232.html.

Since serial cable can only be used in near distance, when the distance is too far, use can use direct network connection or RS232 to network connection:

1.2 RS232 to network connection

For this connection, we supply a converter for client to convert RS232 to network: NC6XX series IO-Server.

	Function
3 (POS system) 2	Tx Rx
5 (POS system) 5	Signal Ground
1 + 4 + 6	DTR CD + DSR
7 + 8	RTS CTS

The IO server adopts RJ45 standard RS-232-C interface, for the conversion between DB9 and RJ45, please refer to corresponding manual, here take NC602 for instance:

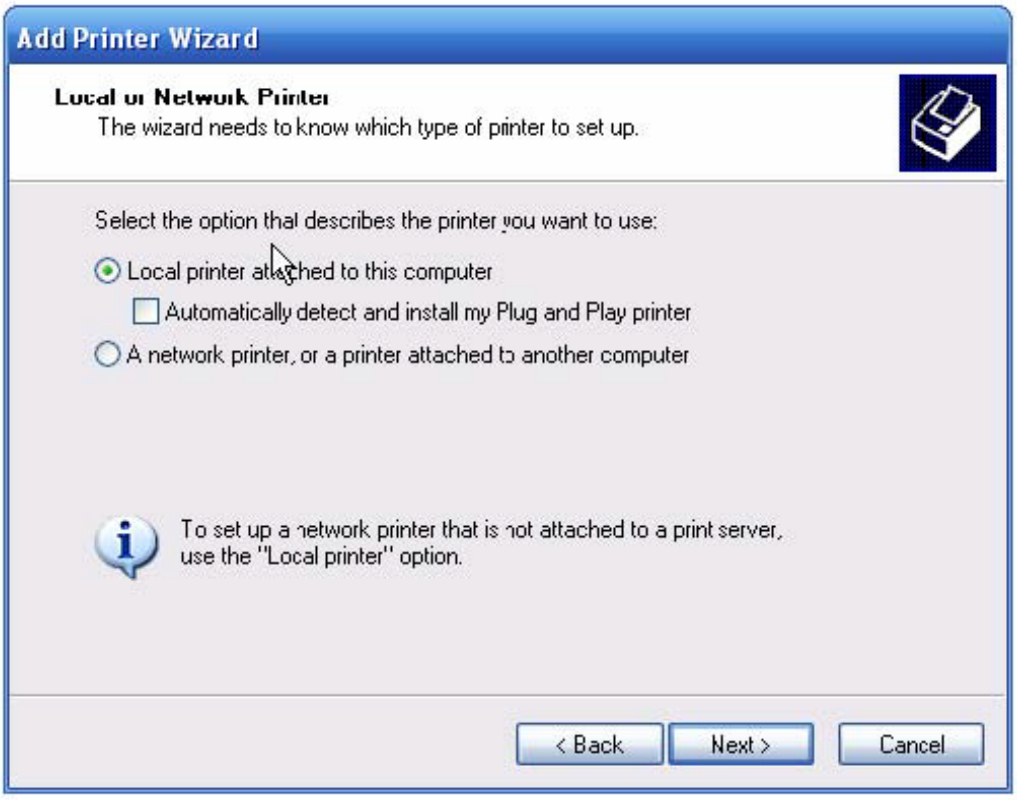
1.3 Direct network connection

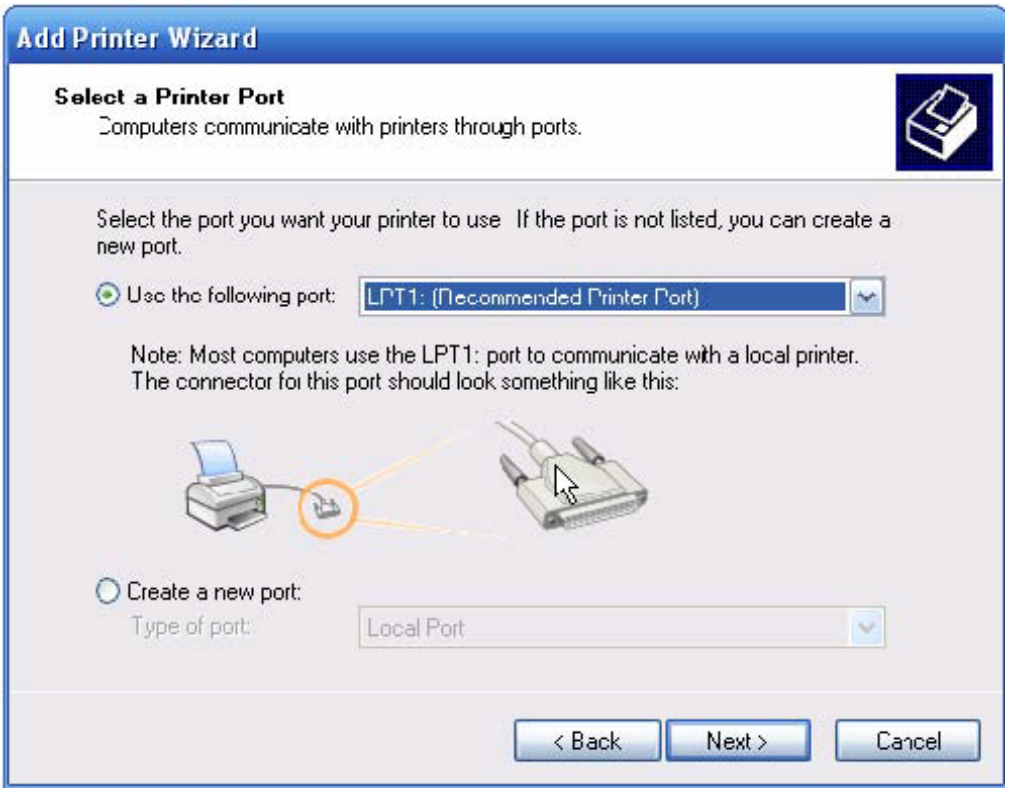
Generally speaking, user use network printer for direct network connection, since it will cause difficulty to read the text over video, we do not recommend user to use this connection.

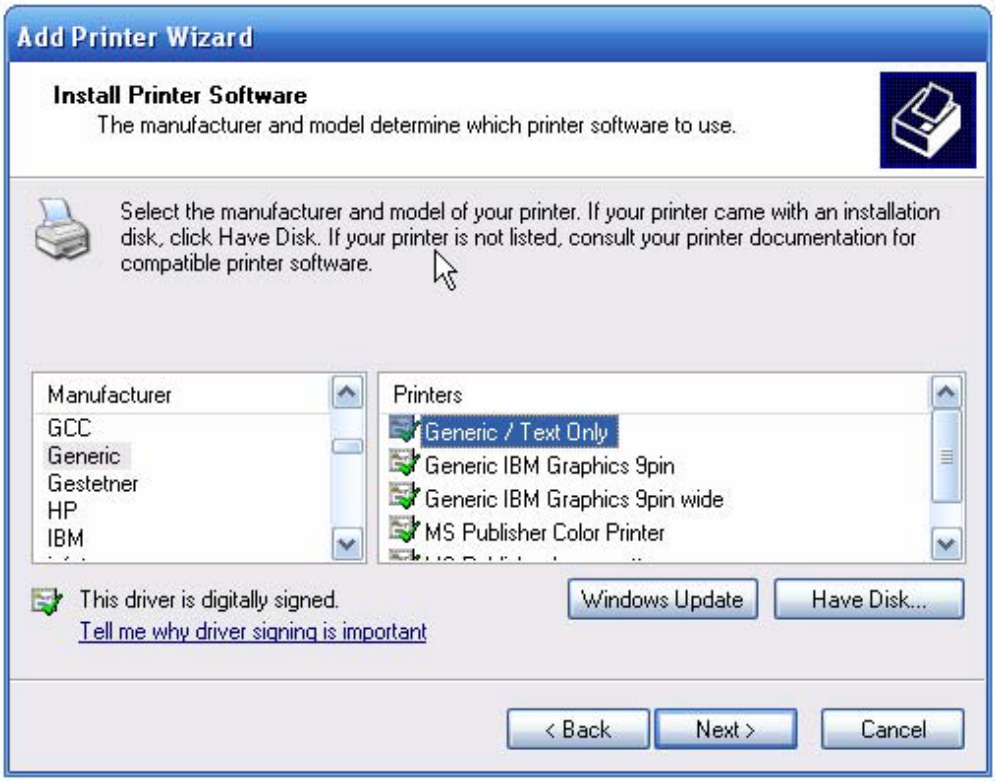
A. Install Generic / Text Only printer driver on the PC you run HVR (such as 192.168.0.102)

	POS System (DB9)
1 TXD	2 RXD
2 RXD	3 TXD
3 RTS	8 CTS
4 CTS	7 RTS
5 DSR	4 DTR
6 GND	5 GND
7 DTR	6 DSR
8 DCD	1 DCD

Windows Catalog
Windows Update
Programs
Settings
Search
Help and Support
Run...
Log Off Administrator...
Turn Off Computer...
Windows XP Professional
Control Panel
Network Connections
Printers and Faxes
Taskbar and Start Menu
Add, remove, or
fax printers.
txt
nvmpsys.cfg
NVMP_ACS
.102
dat
Shares on
192.168.0.120


Add Printer Wizard
Local or Network Printer
The wizard needs to know which type of printer to set up.
Select the option that describes the printer you want to use:
Local printer attached to this computer
Automatically detect and install my Plug and Play printer
A network printer, or a printer attached to another computer
To set up a network printer that is not attached to a print server, use the "Local printer" option.
< Back
Next >
Cancel

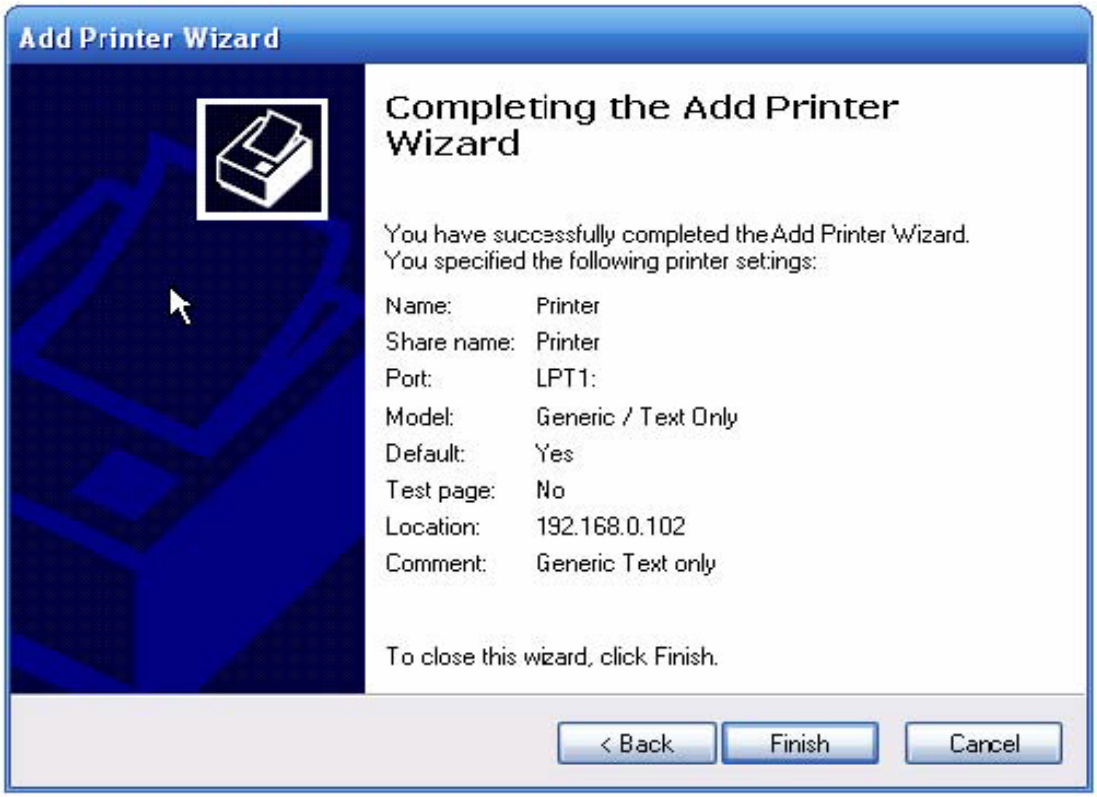




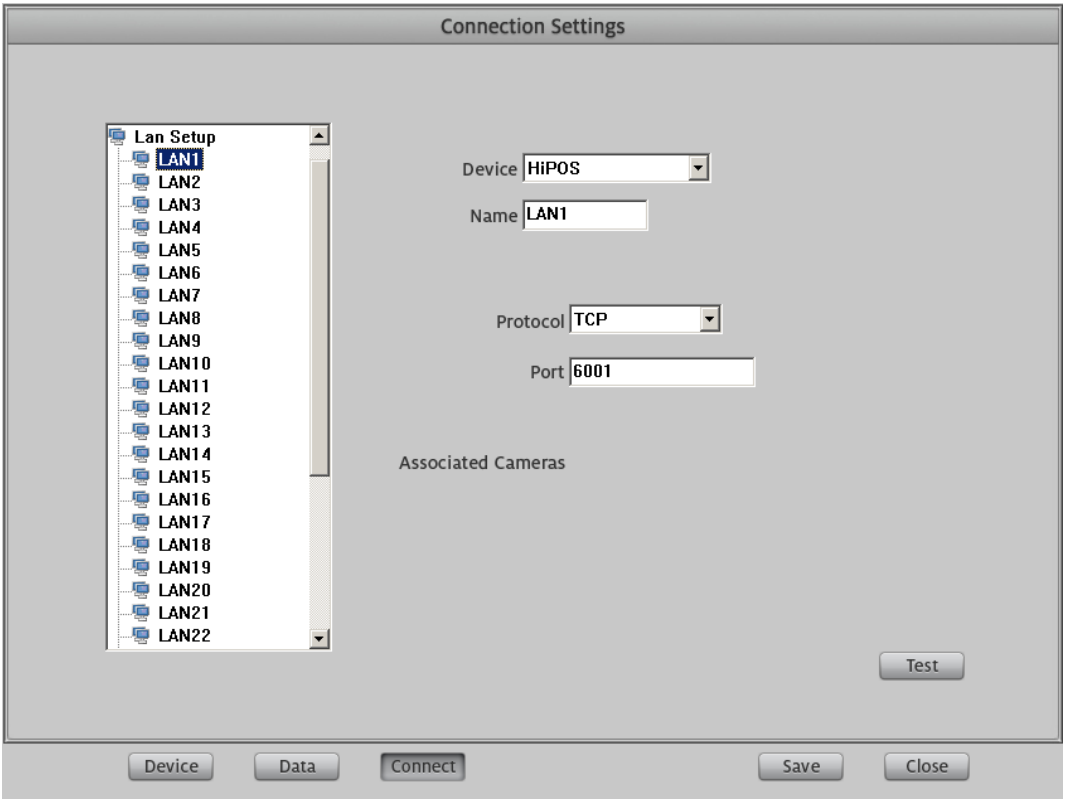
Select “Generic””Generic / Text Only

Share the “printer”

Now you can think the HVR as a shared network printer.

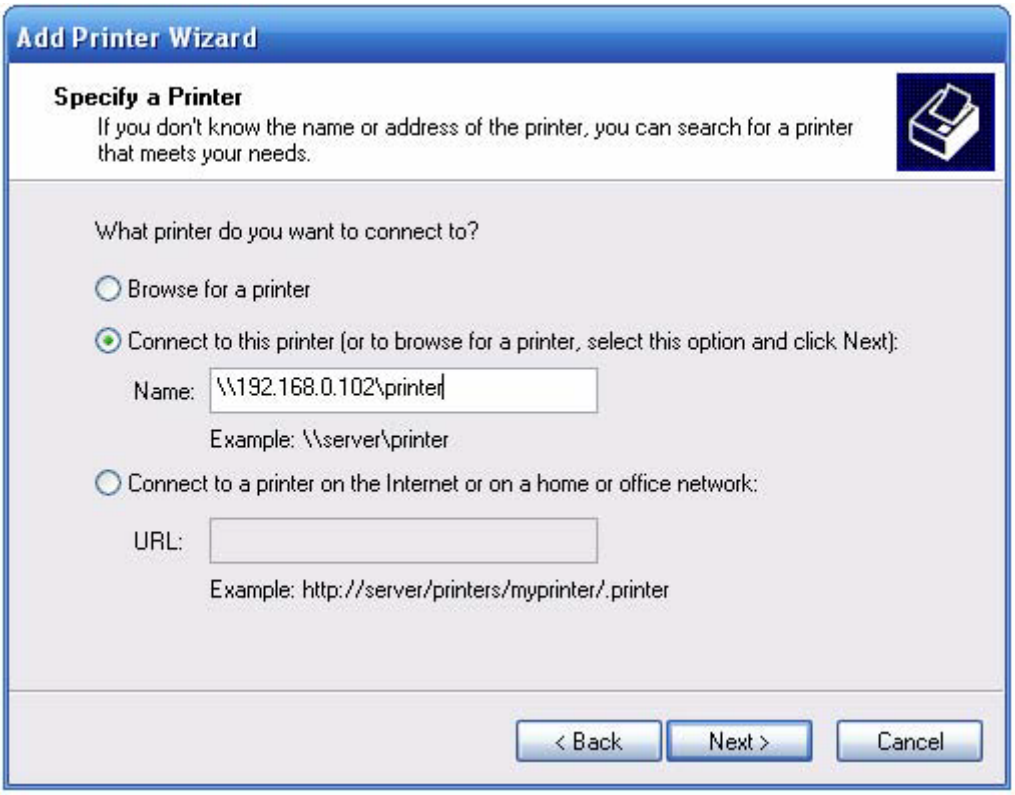


B. Set a port (such as 6001) to get text information from POS under POS setup interface in HVR.



Set the port 6001 in HVR to receive the text information from POS

C. Add the printer on the PC that run HVR as a network printer for POS (such as 192.168.0.123) and set it as the default printer for POS.

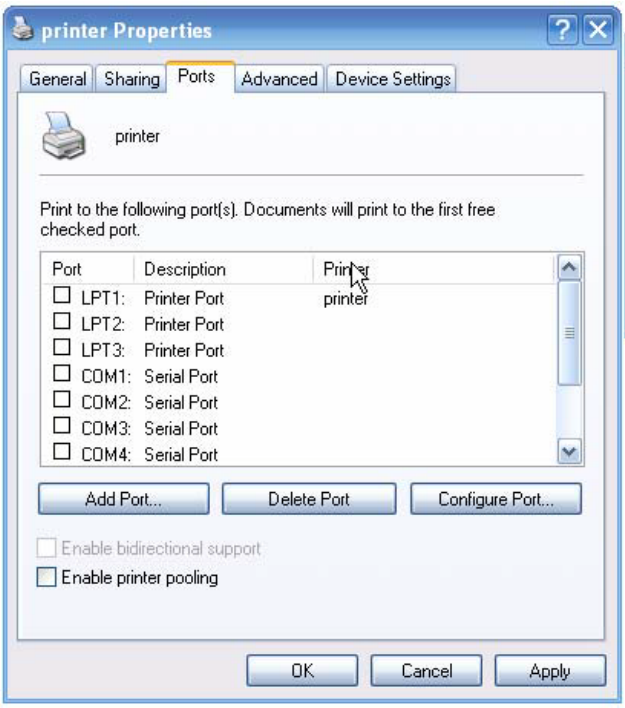


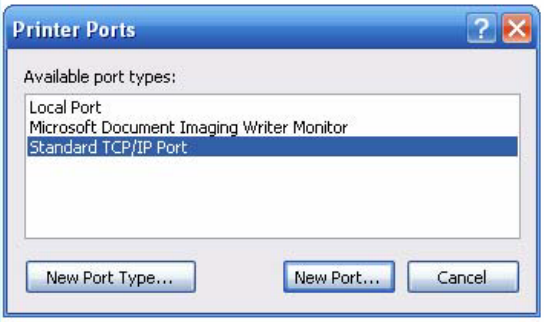
Add a network printer

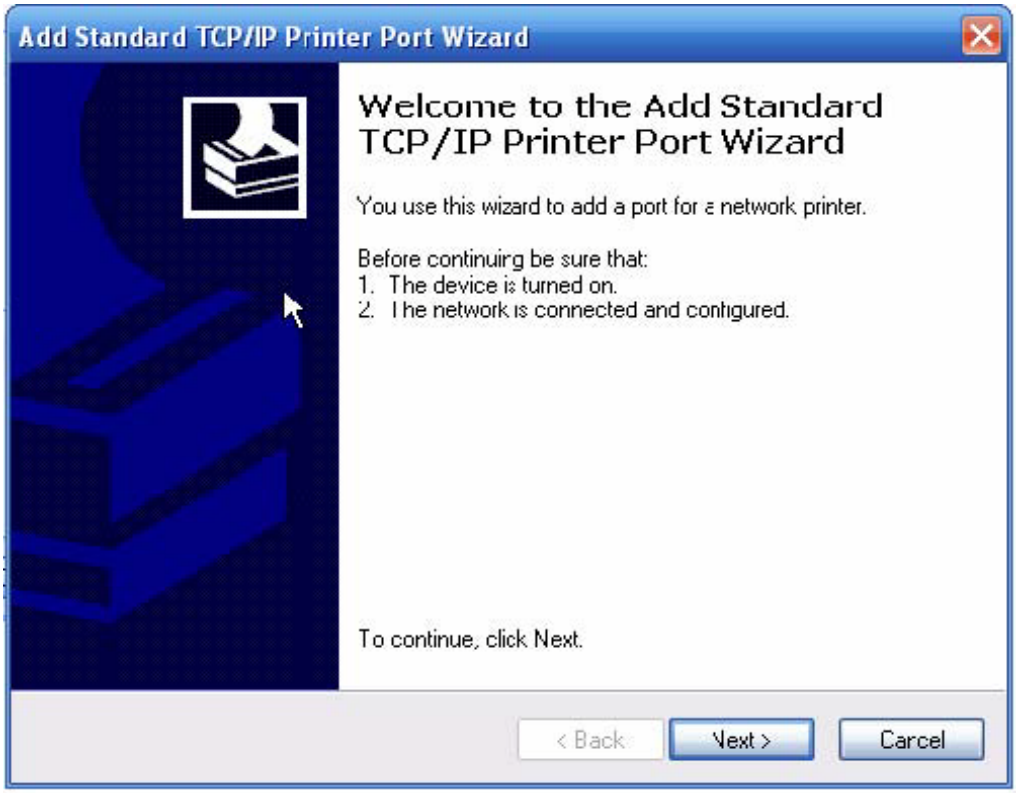
Add the printer shared in 192.168.0.102 (HVR)

Set the shared printer in 192.168.0.102 as the default printer

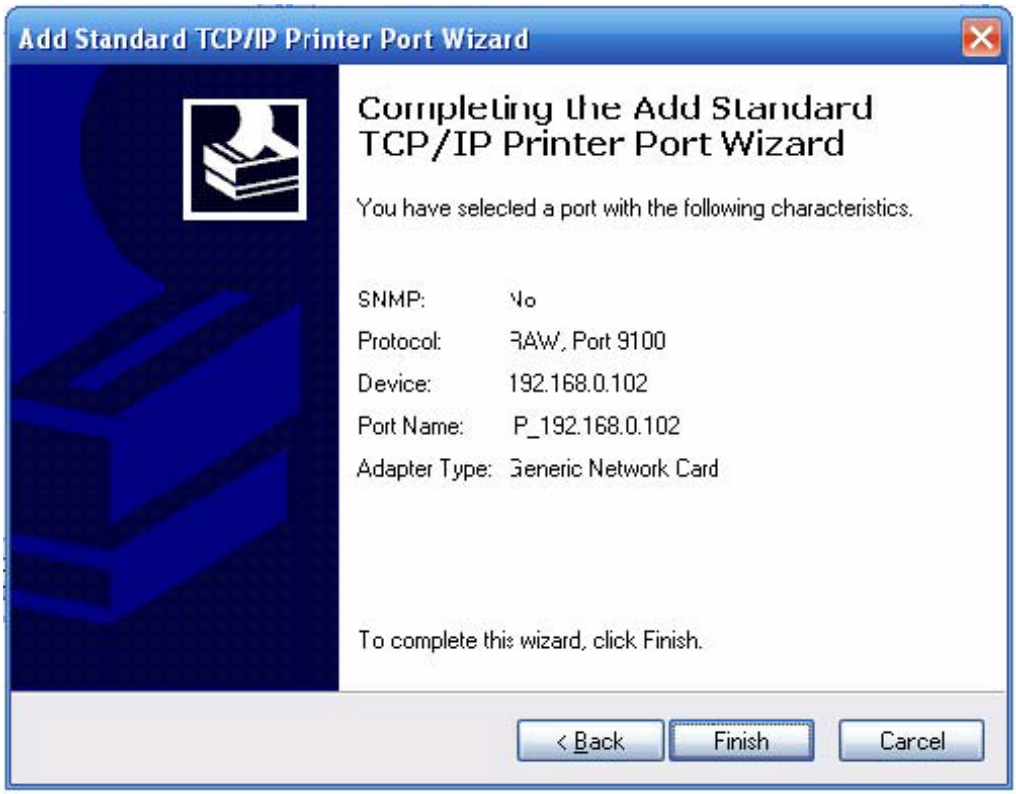
D. Add a standard TCP/IP Port for default printer of POS:


printer Properties
General
Sharing
Ports
Advanced
Device Settings
printer
Print to the following port(s). Documents will print to the first free checked port.
Port
Description
Printer
LPT1: Printer Port printer
LPT2: Printer Port
LPT3: Printer Port
COM1: Serial Port
COM2: Serial Port
COM3: Serial Port
COM4: Serial Port
Add Port...
Delete Port
Configure Port...
Enable bidirectional support
Enable printer pooling
OK
Cancel
Apply

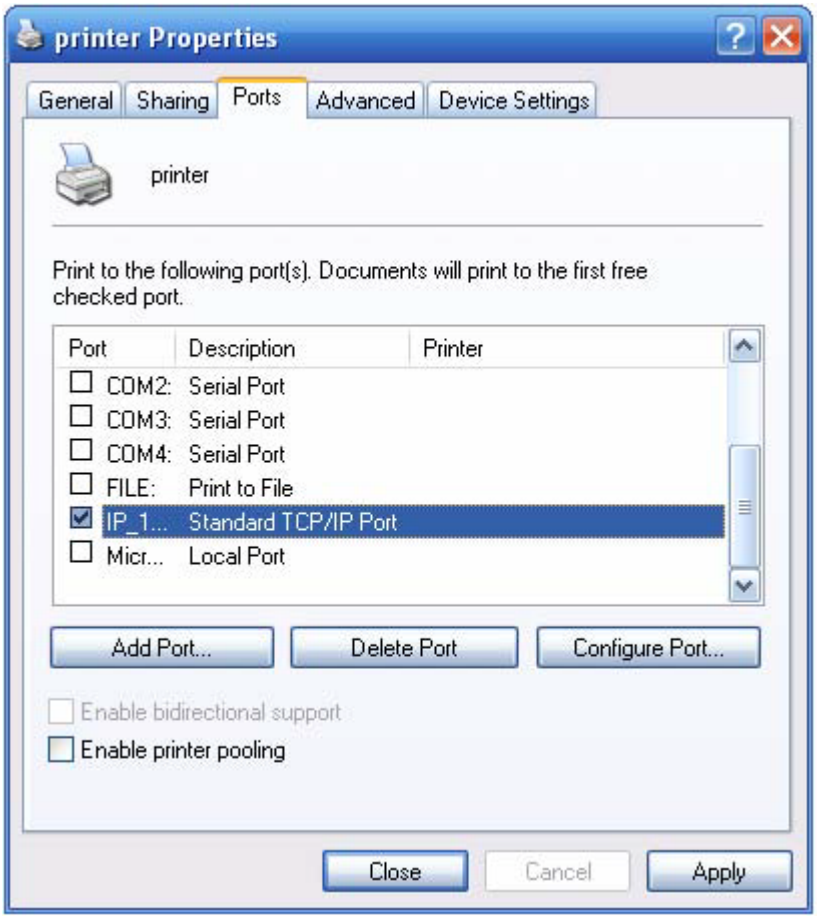

Printer Ports
Available port types:
Local Port
Microsoft Document Imaging Writer Monitor
Standard TCP/IP Port
New Port Type...
New Port...
Cancel

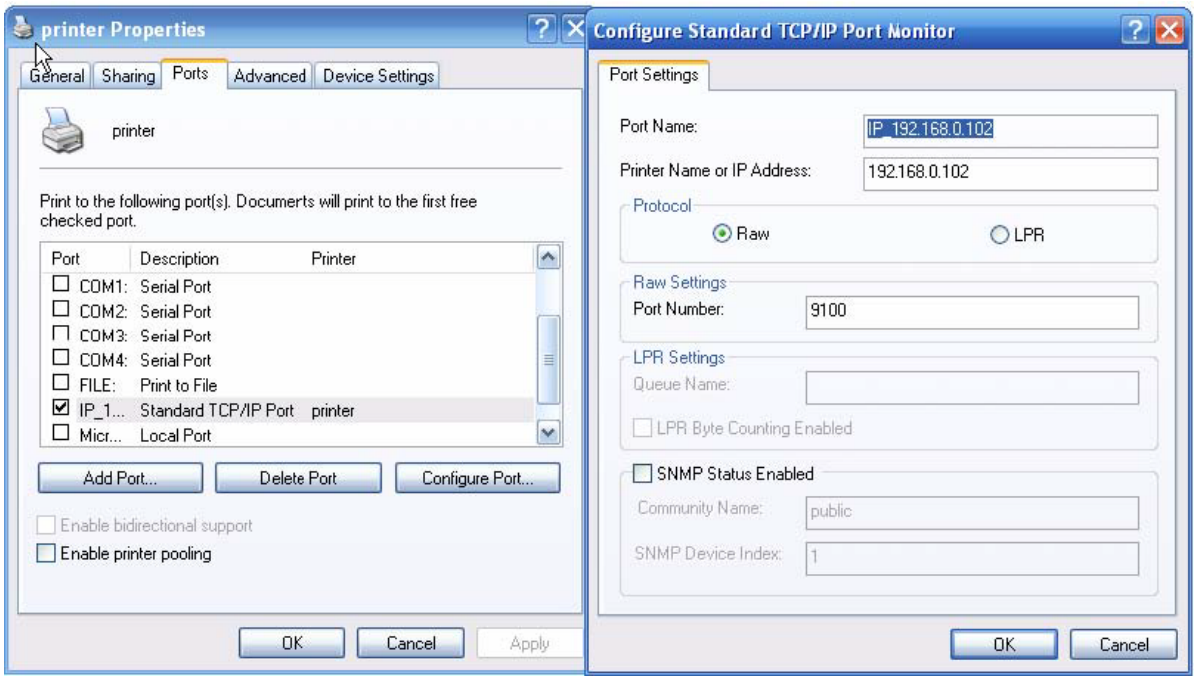

Add Standard TCP/IP Printer Port Wizard
Welcome to the Add Standard TCP/IP Printer Port Wizard
You use this wizard to add a port for a network printer.
Before continuing be sure that:
1. The device is turned on.
2. The network is connected and configured.
To continue, click Next.
< Back
Next >
Cancel

Add Standard TCP/IP Port



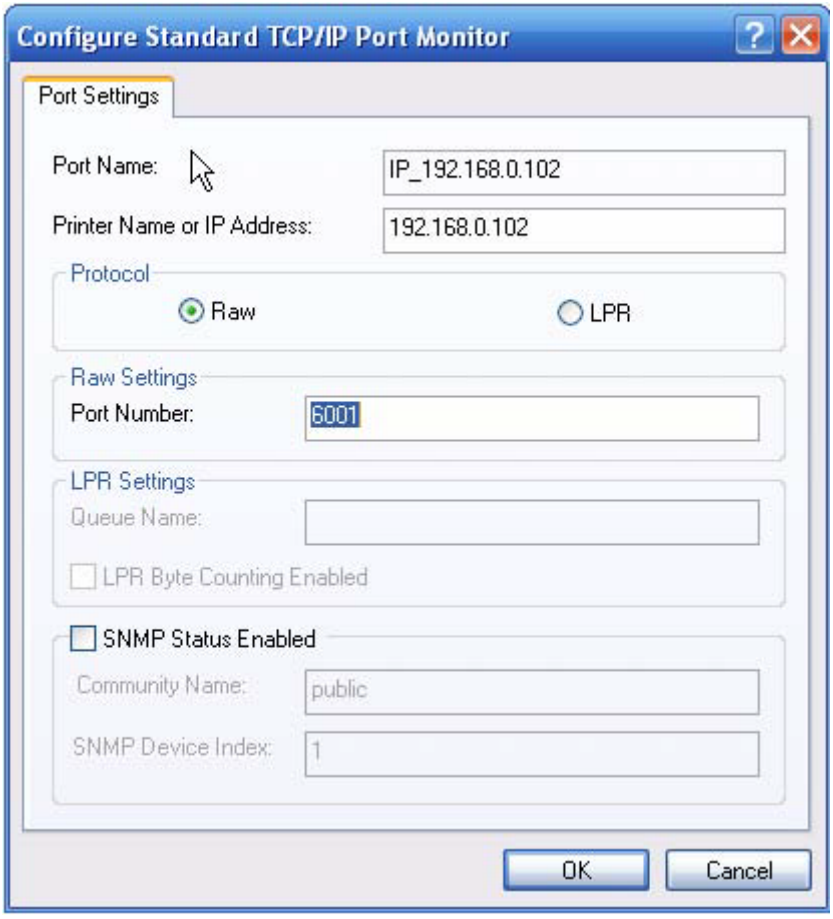
Network printer: IP 192.168.0.102, default port: 9100





The result of setting

Configure the standard TCP/IP Port

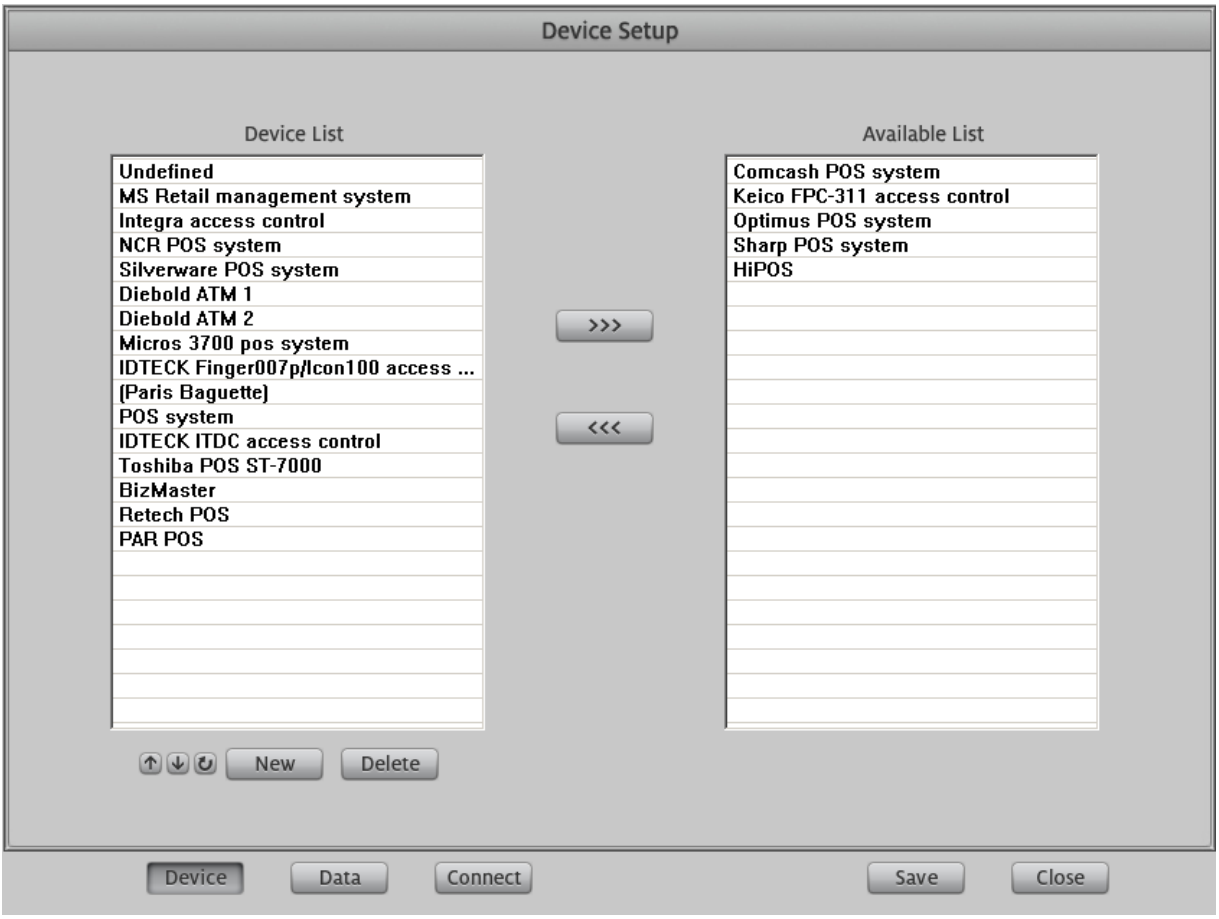


Change the default port 9100 to 6001

The port 6001 is the port for HVR to receive the information from POS. Or user can change the receive port of HVR to 9100, which is the same as the default network printer port.

2. POS Setup

Add/delete device



Open POS Setup interface and press Device button, user can add/delete device in the left list:

Press New button, system will add a device named “New Device”, user can single-left-click to select it and again to change its name as you like.

After that, user can press the arrow in the middle to add them to the available list.

For more info please refer to HVR Server user manual.

Manufacturer: ILDVR DIGITAL TECHNIOLGY USA INC

Web site: www.ildvr.com **Tech-support:** support@ildvr.com