# **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



cal or Network Printer The wizard needs to know which type	e of printer to set up.
Select the option that describes the p	rinter you want to use:
• Local printer at the to this comp	outer
Automatically detect and insta	
O A network printer, or a printer attac	ched to another computer
To set up a network printer to use the "Local printer" option	hat is not attached to a print server, n.
	<pre></pre>



🥥 disk, c	nd model of your printer. If your printer came ( our printer is not listed, consult your printer do e.	
Manufacturer GCC Generic Gestetner HP BM	Printers Generic / Text Only Generic IBM Graphics Spin Generic IBM Graphics Spin wide MS Publisher Color Printer	

Select "Generic" 'Generic / Text Only

suggested name or typ users. ODo not share this p	his printer, you must provide a share name. You can use the ppe a new one. The share name will be visible to other network printer rnter
O Do not share this p	
⊙ <u>S</u> hare name: pr	rnter
	$\searrow$
	v
	< Back Next > Cancel

### Share the "printer"

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

Add Printer Wizard		
	Wizard You have suc	ccessfully completed the Add Printer Wizard.
		I the following printer set:ings:
7	Name:	Printer
2.00	Share name:	Printer
	Port:	LPT1:
	Model:	Generic / Text Only
	Default:	Yes
	Test page:	No
	Location:	192.168.0.102
	Comment:	Generic Text only
	To close this	wizard, click Finish.
		< Back Finish Cancel

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.

d Printer W	/izar d
	twork Printer rd needs to know which type of prnter to set up.
Select the	e option that describes the printer you want to use:
🔘 Local	printer attached to this computer
A N	utomatically detect and install my Flug and Play printer
💿 A netv	vork 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.
	<pre> Kack Next &gt; Cancel</pre>

ld Printer W	zard
	nter t know the name or address of the printer, you can search for a printer your needs.
What print	er do you want to connect to?
O Browse	for a printer
📀 Connec	t to this printer (or to browse for a printer, select this option and click Next):
Name:	\\192.168.0.102\printer
	Example: \\server\printer
🔿 Connec	t to a printer on the Internet or on a home or office network:
URL:	
	Example: http://server/printers/myprinter/.printer
	< Back Next > Cancel

Add a network printer

Default Printer Your computer will always send do otherwise.	cuments to the default printer unless you specify	
Do you want to use this printer as	he default printer?	
⊙ Yes		
🔿 No		
	$\searrow$	

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:

a printer Properties	?× Printer Ports
General Sharing Ports Advanced Device Settings	Available port types:
printer	Available port types: Local Port Microsoft Document Imaging Writer Monitor Standard TCP/IP Port
Print to the following port(s). Documents will print to the first free checked port.	
Port Description Printer	
	New Port Type New Port Cancel
LPT2: Printer Port	
COM1: Serial Port	
COM2: Serial Port	
COM3: Serial Port	
COM4: Serial Port	
Add Port Delete Port Configure P	Port
Enable bidirectional support	
Enable printer pooling	
OK Cancel	Applu

Add Standard TCP/IP Prin	ter 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 > Carcel

Id Standard TCP/IP Printer   Add Port For which device do you want	F
Enter the Printer Name or IP a	ddress, and a port name for the desired device.
Printer Name or IP Address:	192.168.0.102
Port Name:	IP_192.163.0.102
	<pre></pre>

Add Standard TCP/IP Port

	t Information Requi could not be identified.				
<ol> <li>The device is</li> <li>The address of</li> <li>Either correct the</li> </ol>	vice is of unknown typ properly configured, on the previous page is address and perform a page or select the devic	correct. another search	on the network by		
Device Type Standard Custom	Generic Network Car Settings	rd		<u></u>	]
			Back Ne	xt > Can	cel

Add Standard TCP/IP Print	ter Port Wiza	rd	×
	Completing the Add Standard TCP/IP Printer Port Wizard You have selected a port with the following characteristics.		
$\rightarrow$ $\sim$ .	SNMP:	No	
110	Protocol:	RAW, Port 9100	
	Device:	192.168.0.102	
	Port Name:	P_192.168.0.102	
	Adapter Type:	Generic Network Card	
	To complete th	i≋ wizard, click Finish.	
		< <u>B</u> ack Finish Carcel	

Network printer: IP 192.168.0.102, default port: 9100

💩 printer Pr	operties		2 🔀
General Sha	ring Ports	Advanced Device Setting	s
pri	nter		
Print to the fo		. Documents will print to the fi	irst free
Port	Description	Printer	
🗆 сом2:	Serial Port		
	Serial Port		
	Serial Port		
	Print to File		
	Standard TC	P/IP Port	
Micr	Local Port		~
Add P	ort	Delete Port	Configure Port
Enable bi	directional sup	port	
	inter pooling	port	
	inter pooling		
		Close	el Apply

General Sharing Ports Advanced Device Settings	Port Settings Port Name: Printer Name or IP Address	IP_192.168.0.102
Print to the following port(s). Documerts will print to the first free checked port.	Protocol	C LPB
COM1: Serial Port     Frinter       COM2: Serial Port       COM3: Serial Port       COM4: Serial Port       FILE: Print to File       IP_1 Standard TCP/IP Port printer       Micr Local Port	Raw Settings Port Number: LPR Settings Queue Name: LPR Byte Counting E	9100
Add Port Delete Port Configure Port Enable bidirectional support Rnable printer pooling	SNMP Status Enable Community Name: SNMP Device Index:	public
OK Cancel Apply		OK Cano

The result of setting

Configure the standard TCP/IP Port

Port Name: 🔓	IP_192.168.0.102
Printer Name or IP Address:	192.168.0.102
Protocol	21-24 acts
💽 Raw	
Raw Settings	
Port Number:	6001
LPR Settings	
Queue Name:	
LPR Byte Counting En	abled
SNMP Status Enabled	(=
Community Name:	public
SNMP Device Index:	1
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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

Device Setup				
Device List Undefined MS Retail management system Integra access control NCR POS system Silverware POS system Diebold ATM 1 Diebold ATM 2 Micros 3700 pos system IDTECK Finger007p/lcon100 access [Paris Baguette] POS system IDTECK ITDC access control Toshiba POS ST-7000 BizMaster Retech POS PAR POS	>>>	Available List         Comcash POS system         Keico FPC-311 access control         Optimus POS system         Sharp POS system         HiPOS		
Device Data Con	nect	Save		

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