

Pelco DX-8100 ATM/POS Configuration AVE VSI-Pro Max 16 POS Networking

Introduction

The VSI-Pro Max contains the standard Cash Register RS-232 Serial port DB9 which connects to the POS/ECR via the line of cables supplied by AVE. It also contains two RJ45 RegCom Networking connectors which are simply in parallel to easy installation for daisy chain configurations. A VSI-Pro Max can either be a slave or master device will simultaneously connected to a POS and formatting the data to deliver to the DVR.

Networking

All the VSI-Pro Max slaves will be in a daisy chain configuration. Standard CAT5 straight thru cables will go from the last slave in the loop which is the farthest from the master to the next slave and ultimately to the master unit. This farthest unit will also have to be terminated so you need to open the unit per Appendix O Page 81 in the VSI-Pro Max Manual. Add Jumper JP15 which terminates the last slave in the loop with 120 ohms to comply with the RS-485 networking specification. See Appendix N Page 80 in the VSI-Pro Max manual.

The first in the loop will be the master. This unit will also have to be terminated exactly as stated above. The master sends the RS-232 data in the VSI-ADD format to the DX-8100 to Com Port 1 DBF on the rear of the unit. A special NCR tap cable with this master output has been supplied so is required for this master. Since a VSI-Pro Max can not work in NCR 5972 Emulate mode and also be a Master you must connect the Master unit to a POS that has the 5972 customer display installed. The VSI-Pro Max can only work in Tap mode and Master mode simultaneously.

NCR POS with 5972 Customer Display Installation

When a 5972 display is connected to the POS then you will use the "tap" cable which goes in between the Com Port 2 of the POS and the customer display with the Triport Dual Hood end with one DB9F and one DB9M. The other end is a DB9M which plugs to the VSI-Pro Max.

When there is no 5972 installed, you must program the POS to enable the 5972 on Com Port 2 via the programming manual of the POS. Then connect the "emulate" cable to the Com Port. The VSI-Pro Max when set for NCR 5972 emulate will send the proper handshaking signals to the POS so it thinks a real 5972 customer display is connected and will not get errors. If you get errors then make sure you are using the proper cable and the proper programming of the VSI-Pro Max and POS.

Register Selection

NCR

5972 Tap Mode

5972 Emulate Mode

Slave Units

Communication

Register Settings

Interface	RS-232
RX Baud Rate	9600
TX Baud Rate	9600
TX Protocol	ASCII
Parity	NONE
Data Bits	8
HW Handshaking	OFF
SW Handshaking	NONE
Auto Linefeed	ON

Network Settings

Type	Slave
Address	Unique for each VSI-Pro Max 1-16
Protocol	Regcom 9.6K
Baud Rate	9600

Master Unit – Remember the Master can only connect to the POS in “Tap” mode.

Communication

Register Settings

Interface	RS-232
RX Baud Rate	9600
TX Baud Rate	9600
TX Protocol	VSI-ADD
Parity	NONE
Data Bits	8
HW Handshaking	OFF
SW Handshaking	NONE
Auto Linefeed	ON

Network Settings

Type	Master
Address	N/A
Protocol	Regcom 9.6K
Baud Rate	9600

The VSI-Pro Max can be programmed via the OSD and front panel buttons or via a laptop using the PC Programming software supplier. If your installation wires the video cameras through the VSI-Pro Max and then to the DVR you then can use the OSD method but will need a local monitor to see the menus. If you use the laptop method then you can connect directly to the Cash Register RS-232 port on the VSI-Pro Max and upload settings quickly and easily and save the files.

NOTE: Windows Vista has a serious problem with using a ComPort and if you use Hyperterminal on Vista with a USB to RS-232 adapter or have a laptop with a Comport expect slow response and X20 the amount of time up upload and download files to the VSI-Pro Max. We strongly recommend XP OS to be used.

DX-8100 Configuration and Connection

Review the pages in the Pelco DX-8100 Manual (C2630M) pages 161 – 181. The Pelco DX-8100 Installation manual (C2629M) has a good section on direct VSI-Pro and VSI-Pro Max connection but does not cover the “Multi” or RegCom networking connection and configuration. It also has an error on the Pin out connection on page 86. The correct pin out is below;

VSI-Pro DB9F	DX-8100 DB9F Com Port 1
Pin 3 TXD	Pin 2 RXD
Pin 5 SGND	Pin 5 SGND

Since this is RS-232C, the official specification is 50 ft from the VSI-Pro Max master to the DVR. However at 9600 baud which is relatively low and the use of high quality shielded data cable 100' is easily obtainable. For longer lengths use the Pelco or AVE RS-232 to RS-485 adapters to convert the RS-232 to RS-485 at the VSI-Pro Max and then back to RS-232 at the DVR. If you have one of the RS-485 ports available on the DVR then you can connect to this port as well and configure accordingly.

Programming

Refer to Page 161 in the Pelco DX-8100 manual. Follow the directions to configure the Com Port 1 for;

Selected Device	ATM/POS
Interface Mode	RS-232
Baud Rate	9600
Parity	NONE
Data Bits	8 bits
Stop Bits	1 bits

See Section 4 on page 165 and Configure the ComPort for “Multi Mode”. This the mode that will read the AVE VSI-ADD protocol for all POS on one serial port. The Address set in the VSI-Pro Max corresponds to the ATM/POS number in the Device Configuration Menu Settings. Configure each device as you see fit for is dependent on how you want the system to function. Go to the Diagnostics tab to view the data from the appropriate POS.

You may also disconnect from the target POS and put the VSI-Pro Max in one of the several Demo modes. The demo mode works exactly like connected to a POS with data being received. Confirm all devices are communicating over the RegCom network and all the data is delivered to the DVR. Then connect back to the POS and configure the DX-8100 for the transaction type and function of your customer.