AVYCON®

AVR–NN / HN / NT / HT **SERIES**

Instruction Guide

POS Integrations Setup

Integrating POS System with AVYCON Recorders

Determine if POS system can send data over TCP/IP

There are hundreds of manufacturers of POS (Point Of Sale) systems that are used in retail locations worldwide, but depending on the age of the system, most will support usually one of the following methods to send data to display/printers:

> **- RS-232 (Serial)**
> **- TCP/IP**

AVYCON recorders will only support data that has been sent over TCP/IP, since there are no serial ports integrated on the back of the devices. So we must determine if the POS system can output TCP/IP natively or if an adapter is needed to send the data via TCP/IP. Unfortunately, we can't document every POS system manufactured and their communication methods, so you may need to contact the manufacturer and see if the specific model you are working with will allow sending data via TCP/IP over an available network port.

TCP/IP

If the POS system supports output via TCP/IP, then there should be a configuration section where you can input the **Port** and **IP address** of the AVYCON recorder, since you need to tell the POS system where to send this data. By default, our recorders have a POS port of **9036**. You will be able to find the IP address of the recorder by accessing the Network Status window on the recorder. This IP address will be required to be input into the settings of the POS system under the section for sending POS data to an IP address. If you can configure the POS system to act as a TCP/IP Client, then it will allow you to input the port and IP address of the AVYCON recorder.

Port used by AVYCON Recorder (web interface)

Attribution	Value
Ethernet Port 1	Online
IPv4 DHCP Status	Succeed
IPv4 Address	192.168.100.162
IPv4 Subnet Mask	255.255.255.0
IPv4 Gateway	192.168.100.1
Preferred DNS	8.8.8.8

IP address information for recorder (web interface)

RS-232

If your POS system does not support sending data via TCP/IP, you will need to connect the RS-232 Serial port on the POS system to a device that can convert it into a TCP/IP data stream. There are many hardware options out there, but a couple of devices that have the best compatibility with our recorders are linked below:

https://www.americanvideoequipment.com/cash-register-interface/ave-npi-.1417.html

https://www.amazon.com/USR-TCP232-302-Serial-Ethernet-Converter-Support/dp/B01GPGPEBM

With these devices, you can simply connect an RS-232 cable from the back of our POS system to the RS-232 port on these devices, and then with a couple of configuration settings, you can begin to show POS Data on your AVYCON recorder's screen.

There are basically two settings to configure on the RS-232-to-TCP/IP device: The proper settings for the serial (RS-232) communication, and then what IP address to send the data to, which is going to be the IP address of the AVYCON recorder. First, you will need to log into the RS-232-to-TCP/IP converter with its IP address and find where to configure the RS-232 settings to match what the settings are for your POS device. You may need to contact the manufacturer of the POS system to determine what the settings are for the RS-232 port, or how to enter a configuration menu on the POS device to check these settings. For example below, we are matching the baud rate, data size, parity, and stop bit on the <u>USR-TCP232-302</u> device to match the POS system serial settings.

Serial port configuration for RS-232-to-TCP/IP device

Also, you will need to tell the RS-232-to-TCP/IP device to act as a TCP Client, so that it allows the device to connect and send the data to the AVYCON recorder. To configure this, you will need to find a menu item similar to what is shown below.

TCP/IP and Port Configuration for RS-232-to-TCP/IP device

In this example above, we have input the IP address of the recorder (**192.168.100.162**), and also the remote port number (**9036**, default POS port for AVYCON recorders).

AVYCON Recorder Setup

After configuring the POS system or RS-232-to-TCP/IP adapter to send data to the AVYCON recorder, we will now need to configure the recorder to listen to the IP address of the adapter/POS system. These settings can be configured either through the web interface or directly at the recorder's interface. You will need to navigate to the Settings/Function Panel, and then it will be found under System->POS Settings.

POS Settings for AVYCON recorder (web interface)

For each POS device that you are integrating, you will need to configure the following:

Enable:

Make sure that this option is set to **ON**

Connection:

Choose **TCP Listen** (this will be the most common configuration since this is just bringing in the POS data to the recorder. Other modes are for sending data out to other devices.

Connection Settings:

Click on the Configure button and you will see a window like below
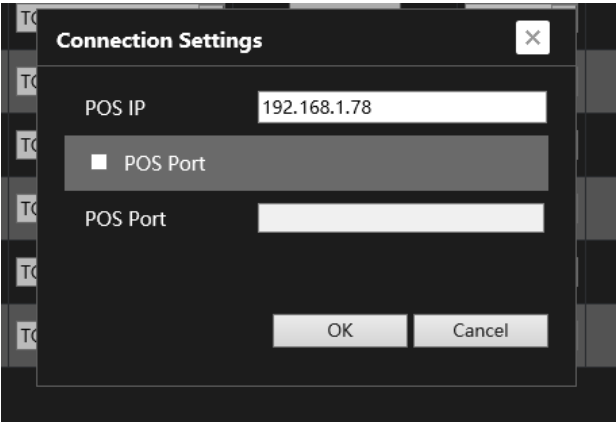
POS IP and Port Settings (web interface)

For POS IP, you will need to put in the IP address of either the POS system that supports TCP/IP or the RS-232-to-TCP/IP device.

For the port, you can usually leave this blank, unless your POS device absolutely requires a port assigned.

Trigger Camera:

You will need to make sure the box is checked in this column and then click on the <u>Configure</u> button. Then you will need to make sure to add the particular camera or cameras that you want the POS data to be displayed on, like below
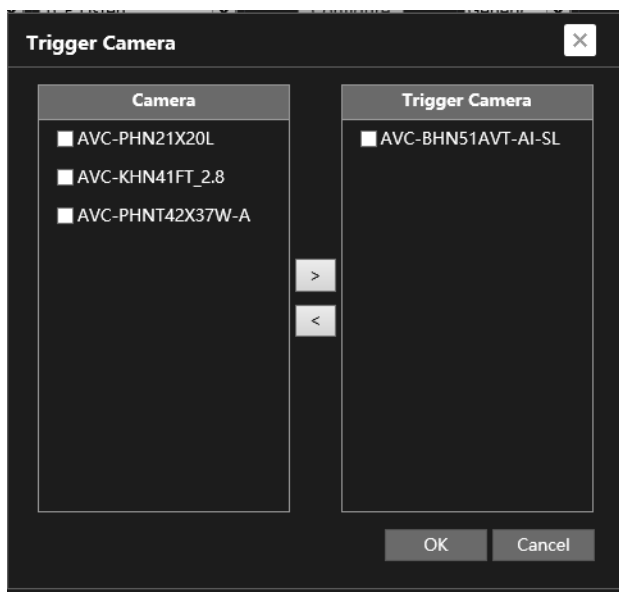
Assigning cameras to POS Stream (web interface)

Display Settings:

By default, the display settings should show the POS data starting on the upper-left part of the screen. If you want to make any changes, you can enter this menu to configure things such as text color and keywords to look out for.

Also, if using the RS232-to-TCP/IP adapters mentioned above, you should not have to worry about configuring the options for Start, End, NewLine, and Ignore characters. If you are using any other native POS output directly for a POS system, you may need to contact that manufacturer for those values.

The most important one usually is the NewLine character, which tells the AVYCON recorder to display information on a new line, so that each item is displayed exactly how it will appear on a receipt. The most common character for this is "\n", which our recorder uses as a default.


POS Display Settings Configuration (web interface)

Manufacturers:

If you find your model of POS system from the drop-down list, please choose it, otherwise choose <u>AVE</u>, which is the most compatible method for use with most POS TCP/IP output.

After you have modified these settings, click the <u>Apply</u> button. You will also need to configure the AVYCON recorder to record when it sees POS data coming in. To do this, we will need to navigate to the Settings/Function Panel, and then it will be found under <u>Record->Mode Settings</u>. If you do not see POS recording selected, you can click on the <u>Advanced</u> button and then choose all record modes that you want the recorder to follow, but at least make sure that <u>POS Record</u> is selected. Make sure to click <u>Apply</u> when you are done, so that it saves all settings.
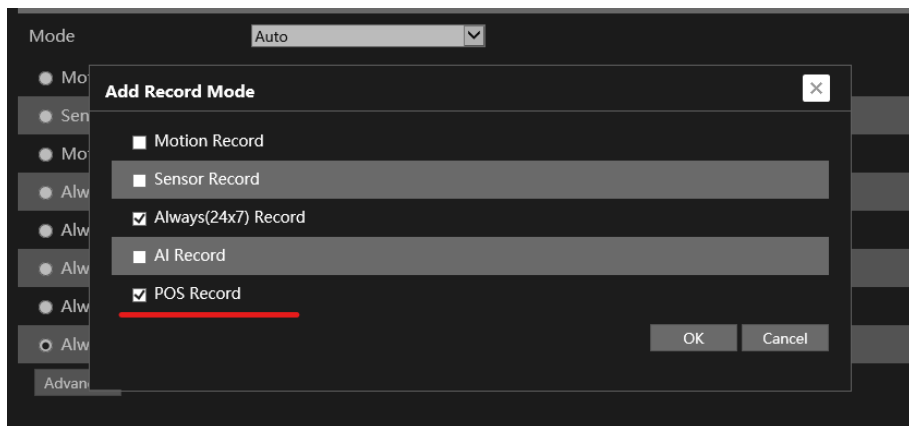
Testing with Live Video

Now that these settings have been configured, you can try to generate some POS data from your device. First, on a local display or through the web browser, bring the single channel/camera that you had configured for POS data into a single camera view. Now, you can start generating transactions on the POS device, and if everything was configured correctly you will start seeing the POS data overlaid on the screen. Also, the recording indicator will change to the color purple to indicate POS data. It should look similar to what is shown below.

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