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REVISION HISTORY

REVISION	DESCRIPTION	DATE
1.0	First Release	Sept 08
1.1	Updated *Vista*LINK® screen shots	Oct 08
1.2	Updates to specifications and VistaLINK® descriptions	Jan 09
1.3	Added section 8, "Configuring Multi-Image Display Products	Mar 09
1.4	Added section 7.2 to VistaLINK® chapter	April 09
1.5	Updated Card Edge Control drawing, Figure 4-1. Updated number of LEDs in section 4.1.	June 09

1. OVERVIEW

Evertz' Nielsen Universal Reader module provides a solution for monitoring the presence of Nielsen codes from the broadcast path. The 7760ND-HD monitors both the video AMOL1/AMOL2 data as well as the audio NAES data. The 7760ND-HD accepts a base band video input transported on SD-SDI or HD-SDI with support for embedded audio.

The presence of codes and the value for the codes are then monitored/reported using various outputs from the device, these include logging and alarming exclusively using VistaLINK® PRO, on screen display (OSD) via the MVP, VIP, VIP-X, and CP-2200E monitoring products (see Table 1-1 below for details on what data each product can support). Also simple card edge status is available using the cards LEDs and dot matrix display.

Features:

- Auto sensing of HD and SD input formats
- De-embedding of program audio from SDI input
- Monitoring of Nielsen data (NAES) from PCM audio
- Monitoring of Nielsen data (AMOL1/AMOL2) from video content
- Proprietary data service output for OSD on VIP/MVP/VIP-X/CP2200E products
- Exclusive monitoring, alarming and logging using VistaLINK® PRO
- Reporting signal presence and SID presence via card edge LEDs
- Nielsen code reporting via card edge dot matrix
- Highly reliable, hot-swappable platform, including redundant power supplies
- Does not require the use of the 7700FC, supports VistaLINK® Pro connection via Ethernet

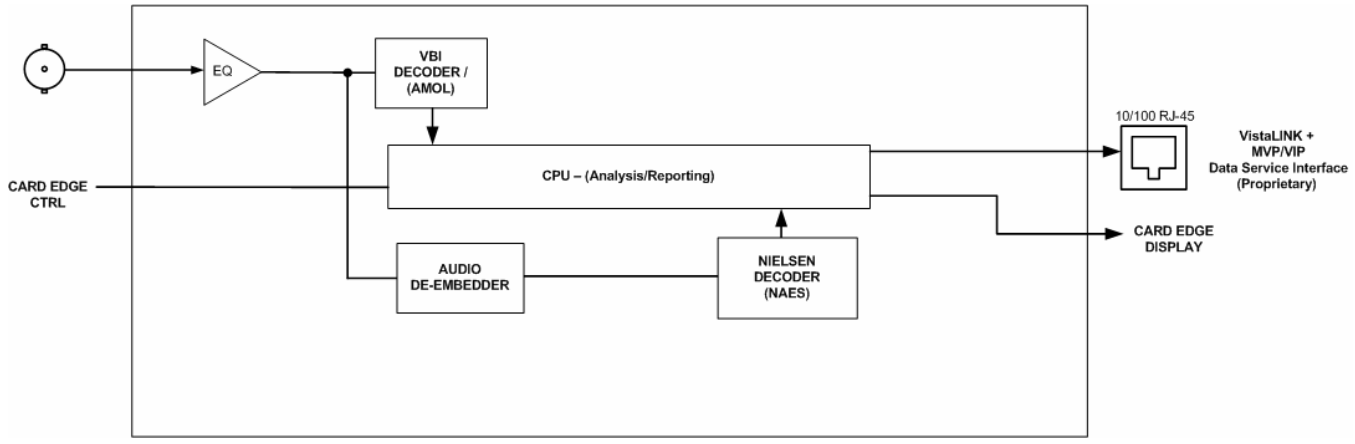

Figure 1-1: 7760ND-HD Block Diagram

The display of the monitored Nielsen data is available on various Evertz monitoring products. Each product can be setup to receive the monitored data distributed from the 7760ND-HD over the network.

Use this table to identify the level of support offered by Evertz' monitoring products:

Monitoring Product	AMOL1	AMOL2	NAES
VistaLINK PRO®	Fully supported	Fully supported	Fully supported
MVP™	Not currently available	Not currently available	Fully supported
VIP-Advanced	Fully supported	Fully supported	Fully supported
VIP-X	Fully supported	Fully supported	Fully supported
VIP	Not available	Not available	Not available

Table 1-1: Nielsen Data Availability

2. INSTALLATION

The 7760ND-HD comes with a companion rear plate that has one HD/SD-SDI input (auto-sensing) with audio embedding and one Ethernet connector. The 7760ND-HD rear plate drawing is shown in Figure 2-1.

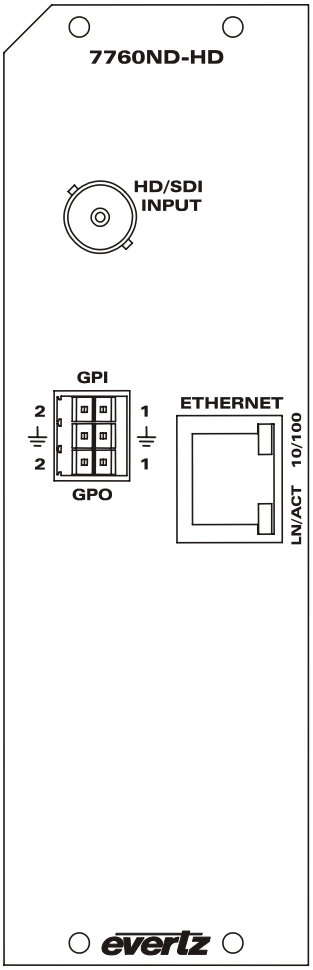

Figure 2-1: 7760ND-HD Rear Panel

2.1. VIDEO INPUT

HD/SDI IN: Input BNC connector for 10-bit serial digital video signals compatible with the SMPTE 292M or SMPTE 259M-C standard. The video standard must be set to match the input video format.

2.2. GENERAL PURPOSE INPUTS AND OUTPUTS

The GPI's are active low with internal pull up resistors (2k Ohms) to +5V. To make an input active, lower the signal to near ground potential (i.e. connect to shell or chassis ground). This can be done with a switch, relay, TTL drive, GPO output or other similar method. Figure 2-2 shows the input circuit for the general purpose inputs.

The GPO is active low with internal pull up (10k Ohm) resistors to +5V. When the output goes low it is able to sink up to 10mA. When high, the signal will go high (+5V). **Do not draw more than 100µA from the output**. Figure 2-3 shows the circuit for the general purpose output.

Please note that the GPI/Os are for future use only. They currently do not have functionality.

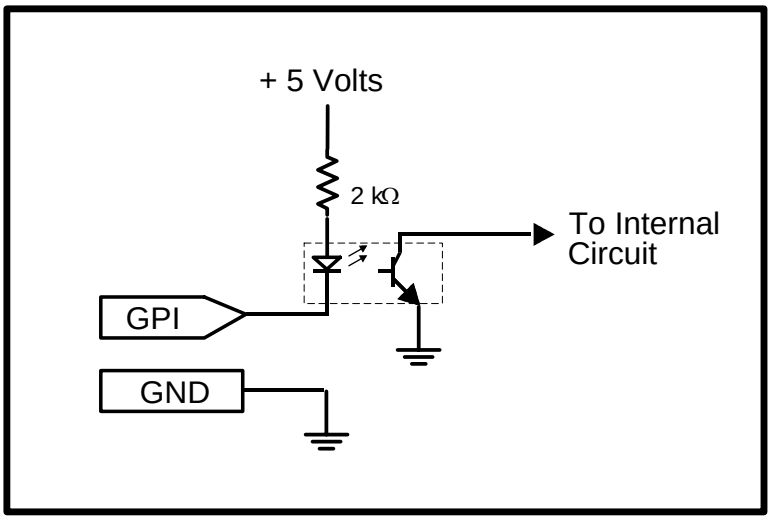

Figure 2-2: GPI Input Circuitry

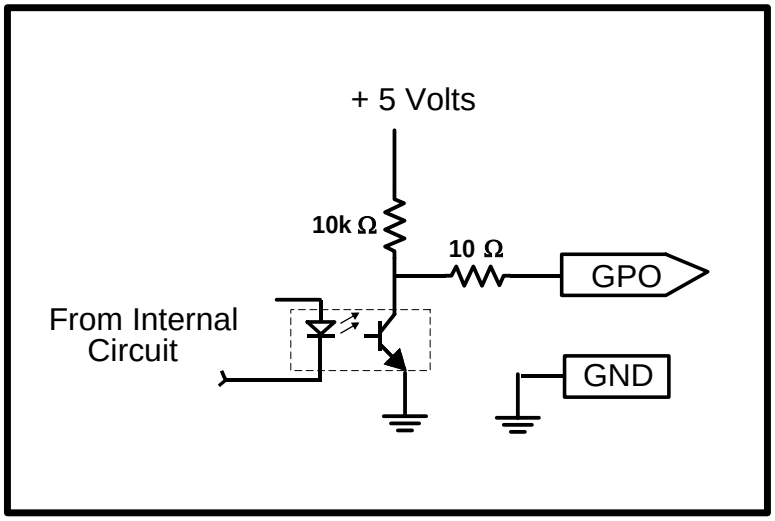

Figure 2-3: GPI Output Circuitry

2.2.1. GPI, GPO and Pin Assignment

The following table provides a description of the GPI and GPO pin assignments.

PIN#	Assignment
1	GPI1
2	GND
3	GPO1
4	GPI2
5	GND
6	GPO2

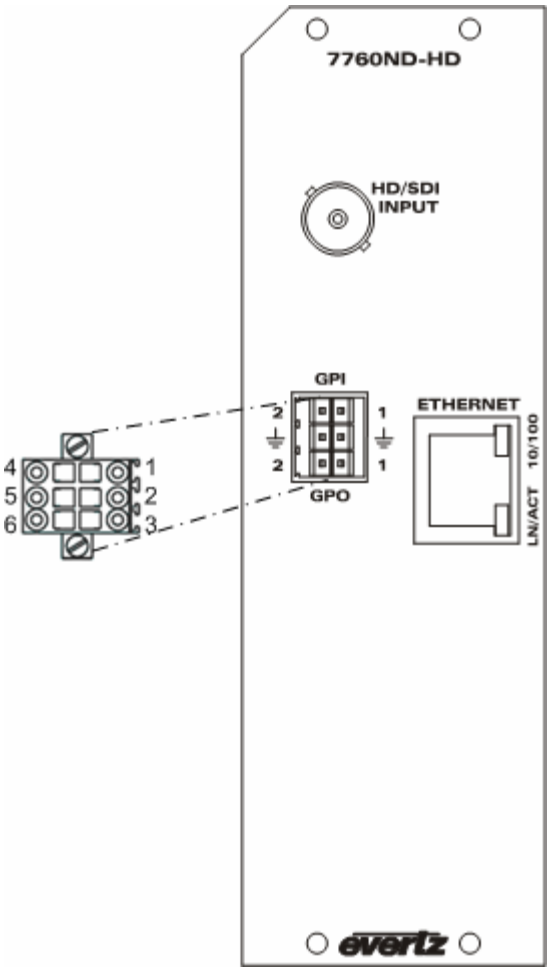

Figure 2-4: GPI and GPO Connections

2.3. ETHERNET NETWORK CONNECTIONS

The Ethernet port is an RJ-45 connector which facilitates control/monitoring via VistaLINK® PRO and therefore the use of a 7700FC is not required. It is also used to communicate to the multi-image display products and for FTP firmware upgrades.

Devices on the Ethernet network continually monitor the receive data path for activity as a means of checking that the link is working correctly. When the network is idle, the devices also send a link test signal to one another to verify link integrity. The rear panel is fitted with two LEDs to monitor the Ethernet connection.

10/100: This Amber LED is ON when a 100Base-TX link is last detected. The LED is OFF when a 10Base-T link is last detected. Upon power-up the LED is OFF as the last detected rate is not known and therefore defaults to the 10Base-T state until rate detection is completed.

LN/ACT: This dual purpose Green LED indicates that the 7760ND-HD has established a valid linkage to its hub, and whether the 7760ND-HD is sending or receiving data. This LED will be ON when the 7760ND-HD has established a good link to its supporting hub. This gives you a good indication that the segment is wired correctly. The LED will BLINK when the 77760ND-HD is sending or receiving data. The LED will be OFF if there is no valid connection.

3. TECHNICAL SPECIFICATIONS

3.1. INPUT SPECS

- 1x HD/SD-SDI input with support for embedded audio.

3.2. OUTPUT SPECS

- Proprietary data service output for OSD on VIP/MVP/VIP-X/CP2200E products. Exclusive VistaLINK® PRO logging and fault monitoring interface. Does not require the use of the 7700FC.

3.3. CARD STATUS

- Card edge dot matrix display, displays decoded Nielson codes
- Input presence LED - red = missing, green = present
- SID (Nielsen code) presence LED - red = missing, green = present

Refer to section 4 for more information on the card edge display and LEDs.

3.4. ELECTRICAL

Voltage: +12V DC
Power: <26W
EMI/RFI: Complies with FCC Part 15, Class A Multi-audio de-compressor module
EU EMC Directive

3.5. PHYSICAL

Number of Slots: 2 (From the front view of the frame, the card must be in installed in the second slot of the two slots – on the right-hand side)

4. CARD EDGE CONTROLS

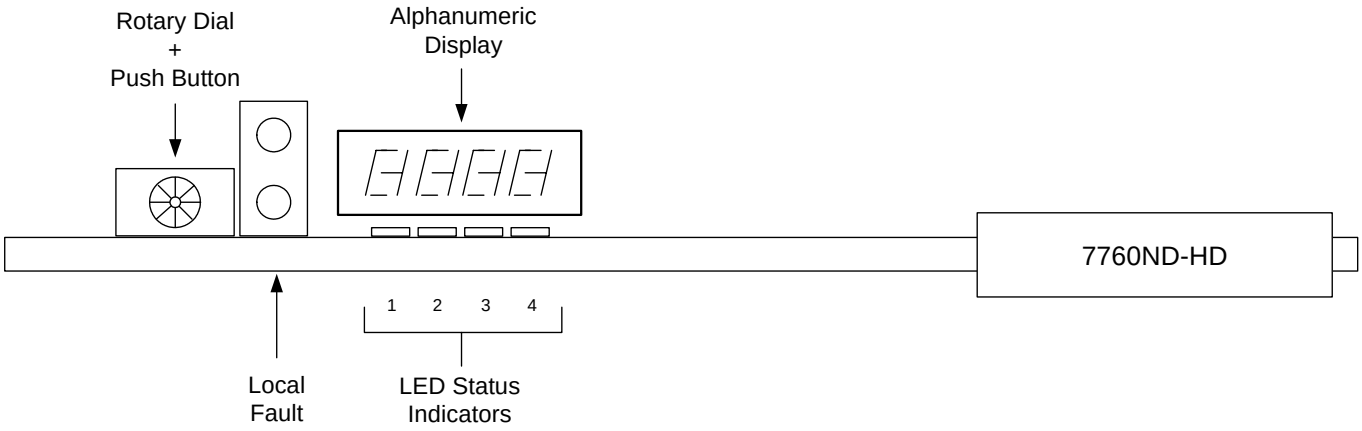

Figure 4-1: Card Edge Controls

ROTARY DIAL & PUSH BUTTON: This component will become active once the card has completed booting. It is primarily used for navigating through the menu system.

MODULE OK: This Green LED will be on when the module is operating properly.

LOCAL FAULT: This Red LED indicates poor module health and will be ON during the absence of a valid input signal or if a local input power fault exists (i.e. a blown fuse). The LOCAL FAULT indication can also be reported to the frame through the FRAME STATUS jumper.

ALPHANUMERIC DISPLAY: Status monitoring and control over the card's parameters is provided via the 4-digit alphanumeric display located on the card edge.

LED STATUS INDICATORS: The status indicators show the operational status of the card. Refer to section 4.1 for a description of the Audio LEDs.

4.1. AUDIO STATUS LEDS

The four LEDs identified in Table 4-1 indicate audio group presence:

Audio LED	Colour	Audio Group Status
1	Off	Group not present with channel 1.
	Green	Group present with channel 1.
2	Off	Group not present with channel 2.
	Green	Group present with channel 2.
3	Off	Group not present with channel 3.
	Green	Group present with channel 3.
4	Off	Group not present with channel 4.
	Green	Group present with channel 4.

Table 4-1: Audio Group Status LEDs

5. JUMPER CONTROLS

Several jumpers, located at the front of the module are used to preset various operating modes.

5.1. SELECTING WHETHER LOCAL FAULTS WILL BE MONITORED BY THE GLOBAL FRAME STATUS

The FRAME STATUS jumper determines whether local faults (as shown by the Local Fault indicator) will be connected to the 7700FR frame's global status bus.

FRAME STATUS: To monitor faults on this module with the frame status indicators (on the Power Supply FRAME STATUS LED's and on the Frame's Fault Tally output) install this jumper in the On position (default)

When this jumper is installed in the Off position local faults on this module will not be monitored.

5.2. CONFIGURING THE MODULE FOR FIRMWARE UPGRADES

RUN/UPGRADE: The RUN/UPGRADE jumper is used when firmware upgrades are being performed on the module. For normal operation it should be installed in the *RUN* position. See the *Upgrading Firmware* chapter in the front of the binder for more information.

To upgrade the firmware in the module unit pull it out of the frame. Move the RUN/UPGRADE jumper J3 into the *UPGRADE* position. Install the Upgrade cable provided (located in the vinyl pouch in the front of the binder) onto SERIAL header J27 at the card edge. Re-install the module into the frame. Run the upgrade as described in the *Upgrading Firmware* chapter in the front of the binder. Once the upgrade is complete, remove the module from the frame, move J16 into the *RUN* position, remove the upgrade cable and re-install the module. The module is now ready for normal operation.

6. CONFIGURATION SETUP

Before the user can adjust the card parameters using *Vista*LINK®, the user must first setup the card configuration using HyperTerminal. Follow the steps outlined below to perform initial card configuration.

1. Attach a serial ribbon cable to the J3 jumper on the top of the card, and plug the other end of the serial cable into the COM port on your computer.

2. Insert the card into the frame and power up the unit.

3. Open a HyperTerminal session and enter the following port settings into the properties window:

Baud	115200
Parity	None
Data Bits	8
Flow Control	None
Stop Bits	2

   Once the settings have been entered select the “OK” button.

4. Hit Ctrl ‘x’ fives times to enter the login command.

5. The user will be prompted to enter a username and password. Use the following username and password to login:

   Login: customer
   Password: customer

6. Once logged in, the user will be presented with a *Main Menu* setup screen as shown in Figure 6-1.

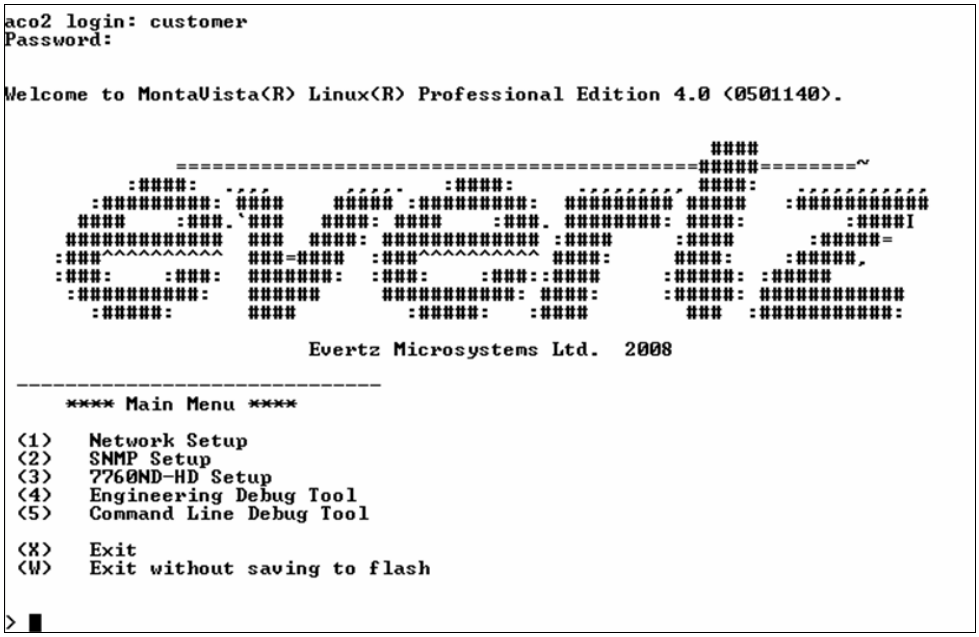

Figure 6-1: Main Setup Menu

7. The user must configure the network of the 7760ND-HD. To configure the network, select option <1> *Network Setup* from the main menu.

8. A *Network Setup* screen, as shown in Figure 6-2, will appear enabling the user to enter the appropriate network information.

9. The user must enter the IP Address, Netmask, Gateway, and Broadcast addresses for the card. Type the corresponding number of the desired address into the command line. For example, to set the IP Address in the Network Setup screen, select option <1> *IP Address*.

10. Once complete, the user will be prompted to enter the IP Address of the card. Enter the IP address and then press the enter key.

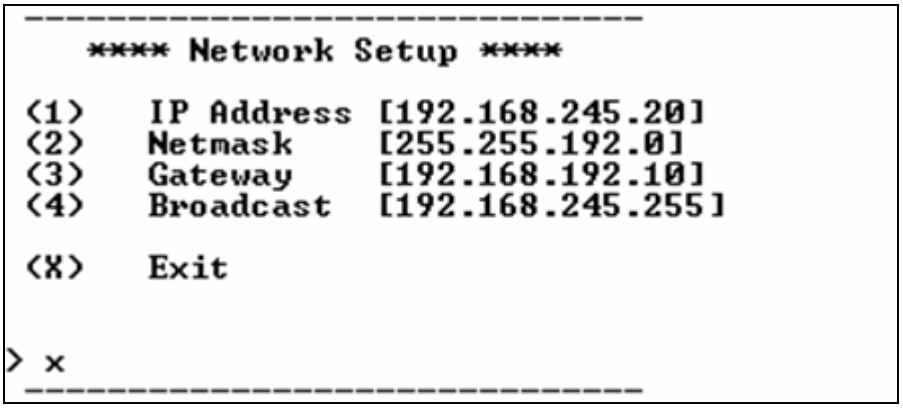

Figure 6-2: Network Setup Menu

11. Once all the settings for the *Network Setup* have been configured, the user can type **x** to exit the *Network Setup* configuration.

12. Next the user will need to configure the SNMP Setup. To do so, return to the main menu screen, as shown in Figure 6-1, and select option <2> *SNMP Setup*.

13. A *Trap Setup* Menu will appear as shown in Figure 6-3. To create a trap destination, select option <1> *Add Trap Destination*.

14. The user will be prompted to enter a destination IP address into the “Enter IP of New Destination” field.

15. The user can enter multiple trap destinations as outlined in steps 11 and 12. To remove a trap destination, select option <2> *Remove Trap Destination* from the menu.

Figure 6-3: Trap Setup Menu

16. The user will be prompted to enter the destination IP address of the trap destination which they wish to remove.

17. The user can view the trap destinations assigned to the card by selecting option *<3> Show All Trap Destinations*. A list of trap destinations will be displayed as shown in Figure 6-4. To exit the *Trap Setup Menu*, select the <x> *Exit* and you will return to the Main Menu.

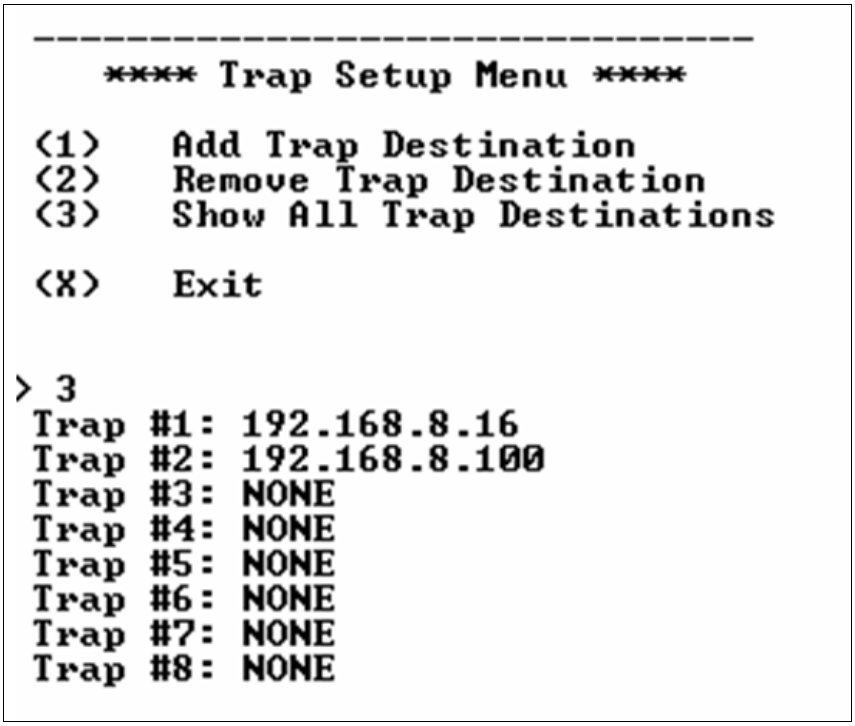

Figure 6-4: Show All Trap Destinations

18. To set the destination IP of the associated VIP or MVP, the user must select option *<3> 7760ND-HD Setup* from the Main Menu, as shown in Figure 6-1. To access this setup menu select option <3> *7760ND-HD Setup* from the Main Menu.

19. The 7760ND-HD Setup screen will appear as shown in Figure 6-5. To set the IP address of the VIP or MVP select option <1> *Set VIP/MVP Destination*.

20. Once the *Enter VIP/MVP Destination Address* appears, the user can enter the IP address of the associated VIP or MVP into the command line and then press the <enter> key to apply the settings, as shown in Figure 6-6.

```
------------------------------
   **** 7760ND-HD Setup ****

(1)   Set VIP/MVP Destination [192.168.192.152]

(X)   Exit

> _
```

Figure 6-5: VIP/MVP Setup Window

```
------------------------------
   **** 7760ND-HD Setup ****

(1)   Set VIP/MVP Destination [192.168.192.152]

(X)   Exit

> 1
> Enter VIP/MVP Destination Address: 192.168.8.50

------------------------------
   **** 7760ND-HD Setup ****

(1)   Set VIP/MVP Destination [192.168.8.50]

(X)   Exit

> x
------------------------------
```

Figure 6-6: Setting the VIP/MVP Destination Address

21. The basic configuration of the card is now complete. Once you have exited the sub-menus and you have returned to the Main Menu screen, the user can save the changes by selecting <X> *Exit* from the Main Menu options.

22. Once the user has exited the Main Menu, the changes will be saved and a message stating "Changes are saved!" will be displayed, as shown in Figure 6-7.

Please note if the user selects option *<W> Exit without saving to flash*, the changes made during the configuration process will be lost.

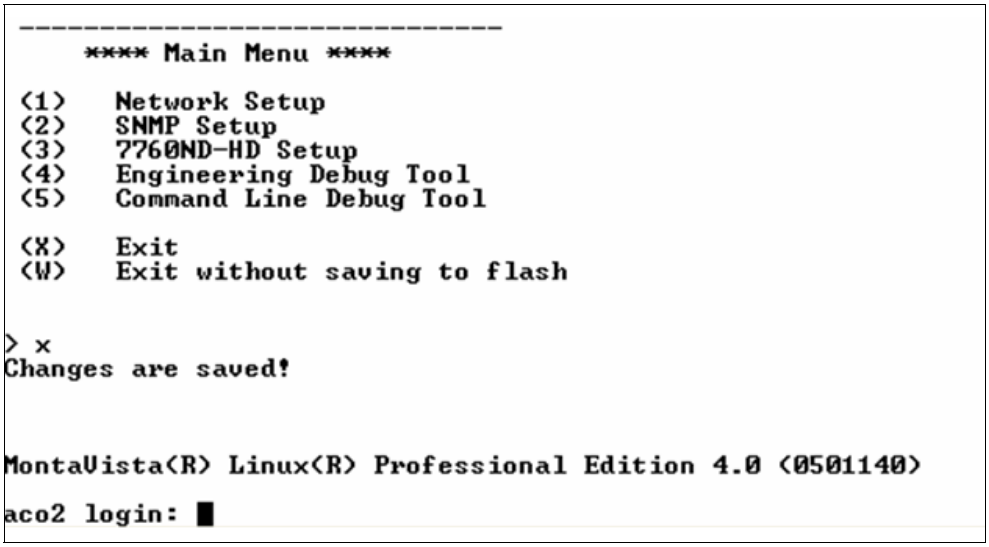

Figure 6-7: Exit to Save Changes

23. Once the changes have been saved, the user must power cycle the unit and remove the ribbon cable before proceeding to VistaLINK® configuration.

7. CONFIGURING USING VISTALINK®

7.1. WHAT IS VISTALINK®?

VistaLINK® is Evertz's remote monitoring and configuration platform which operates over an Ethernet network using Simple Network Management Protocol (SNMP). SNMP is a standard computer network protocol that enables different devices sharing the same network to communicate with each other. VistaLINK® provides centralized alarm management, which monitors, reports, and logs all incoming alarm events and dispatches alerts to all the VLPro Clients connected to the server. Card configuration through VistaLINK® PRO can be performed on an individual or multi-card basis using simple copy and paste routines, which reduces the time to configure each module separately. Finally, VistaLINK® enables the user to configure devices in the network from a central station and receive feedback that the configuration has been carried out.

There are 3 components of SNMP:

1. An SNMP manager, also known as a Network Management System (NMS), is a computer running special software that communicates with the devices in the network. Evertz VL-Fiber demo Manager graphical user interface (GUI), third party or custom manager software may be used to monitor and control Evertz VistaLINK® enabled fiber optic products.

2. Managed devices, (such as 7760ND-HD), each with a unique address (OID), communicate with the NMS through an SNMP Agent. The 7760ND-HD has a built in mini-Agent therefore it does not require a 7700FC, an Ethernet connection is made direct to the card.
3. A virtual database, known as the Management information Base (MIB), lists all the variables being monitored, which both the Manager and Agent understand. Please contact Evertz for further information about obtaining a copy of the MIB for interfacing to a third party Manager/NMS.

For more information on connecting and configuring the VistaLINK® network, see the 7700FC Frame Controller chapter.

7.1.1. Setting Up VISTALINK®

1. To access the card using VistaLINK®, the user must run the VistaLINK® server first followed by the VistaLINK® Pro Client.

   To unlock the VistaLINK® server, enter *administrator* for the username and leave the password blank.

   To access the VistaLINK® Pro Client, enter *administrator* for the username and leave the password blank.

2. Ensure that the latest 7760ND-HD jar file is loaded. Once the VistaLINK® Pro Client is launched the user can view the card in VistaLINK® by selecting the *Refresh Network View*  icon to discover the card. (Refer to section 7.2 of the VistaLINK® user manual for instructions on upgrading product jar files in VistaLINK®).

3. When the network is refreshed, the hardware in the Navigation Tree will be updated. The IP address of the card should be displayed with a plus sign '+' indicating that the card is present in VistaLINK®.

4. Click on the plus sign to expand the IP address and then right click on the 7760ND-HD hardware item. Select *View Configuration…* from the pop up menu that appears, as shown in Figure 7-1.

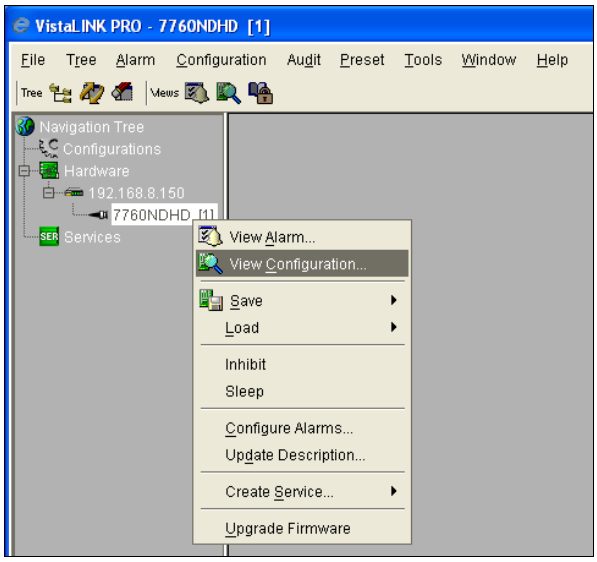

Figure 7-1: Select View Configuration

5. Once *View Configuration* is selected the user will be presented with the main configuration screen, as shown below in Figure 7-2.

6. The user can navigate through the tabs to adjust the configuration parameters. Please see sections 7.1.2 to 7.1.11 for more information on configuring the 7760ND-HD.

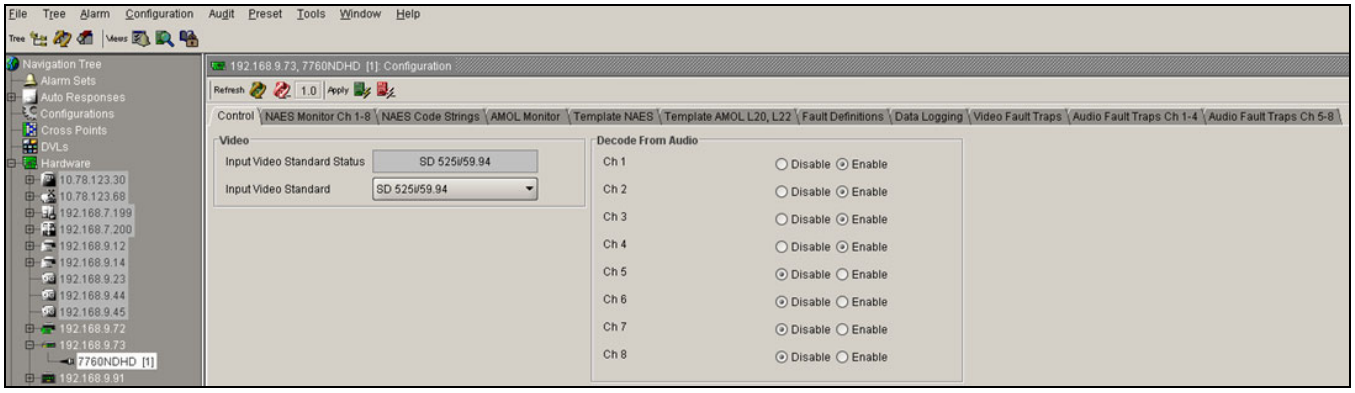

Figure 7-2: Main Configuration Screen

7.1.2. Control Tab

The *Control* tab (shown in Figure 7-3) allows the user to set the video standard and identify the source from which the audio will decode.

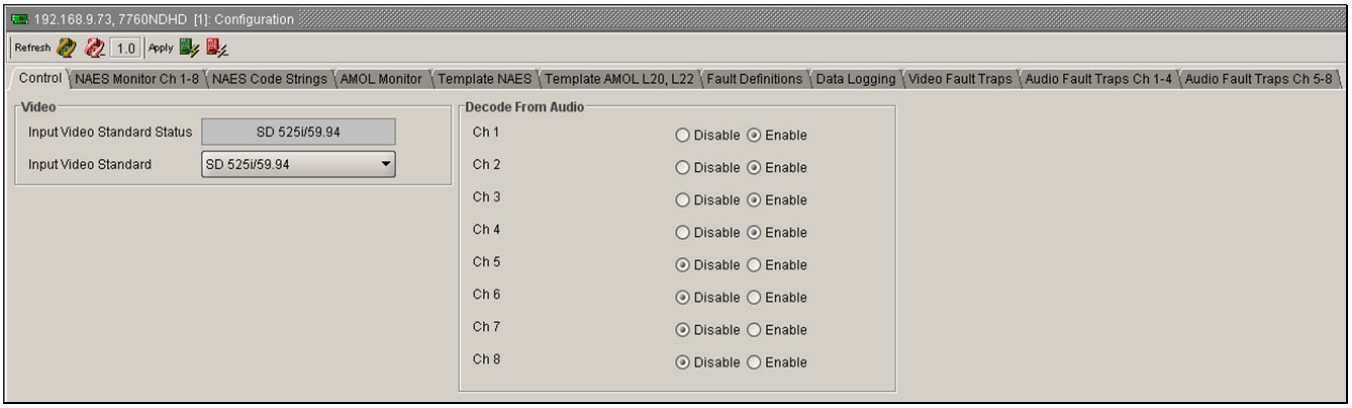

Figure 7-3: Control Tab

- **Input Video Standard Status:** This field displays the current video standard of the 7760ND-HD card.

- **Input Video Standard:** This drop down menu allows the user to select the appropriate video standard. The following is a complete list of video standard options:

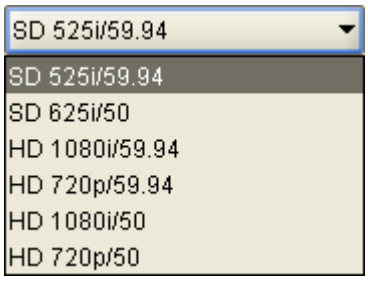

Figure 7-4: Video Standard Drop Down Menu

- **Decode From Audio:** Enables or disables which channels of audio are to be monitored. If the *Enable* radio button is selected, the corresponding audio channel will be monitored.

7.1.3. NAES Monitor CH 1-8

The *NAES Monitor Ch 1 to 8* tab (shown in Figure 7-5) displays the information that is being read from the card. This tab only enables the user to view the status of the card, it does not enable configuration of the card. The fields will only display information if the audio was enabled in the *Decode From Audio* selection in section 7.1.2.

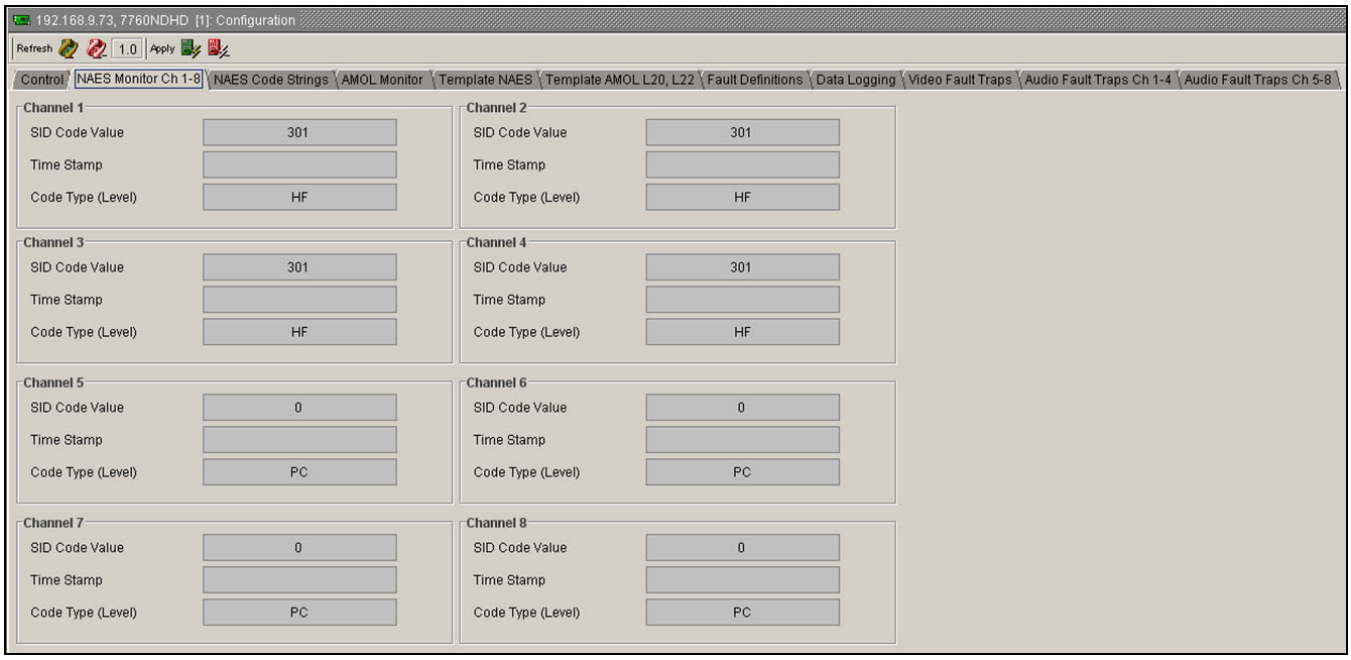

Figure 7-5: NAES Monitor Ch 1-8 Tab

For the sake of brevity, only parameters for Channel 1 will be described below.

- **SID Code Value:** This field displays the Source Identification value for the selected channel.
- **Time Stamp:** This field displays the Time Stamp information (date and time) for the selected channel.
- **Code Type (Level):** This field displays the Code Type (Level). The code type will display one of the following levels: PC (Program Creator), FD (Final Distributor), and HF (High Frequency).
    - **PC: Program Creator:** The *Program Creator* is defined as the station that the program was created by.
    - **FD: Final Distributor:** The *Final Distributor* is defined as the station that is broadcasting the NAES signal. The FD is not the originator of the program, however they are the station currently broadcasting the program.
    - **HF: High Frequency:** *High Frequency* is used for insertion of additional source ID.

      Refer to Nielsen for additional information regarding these Code Type Levels.

7.1.4. NAES Code Strings

The *NAES Code Strings* tab (Figure 7-6) compiles the information displayed on the NAES Monitor screen and outputs the information in code string format, as shown below.

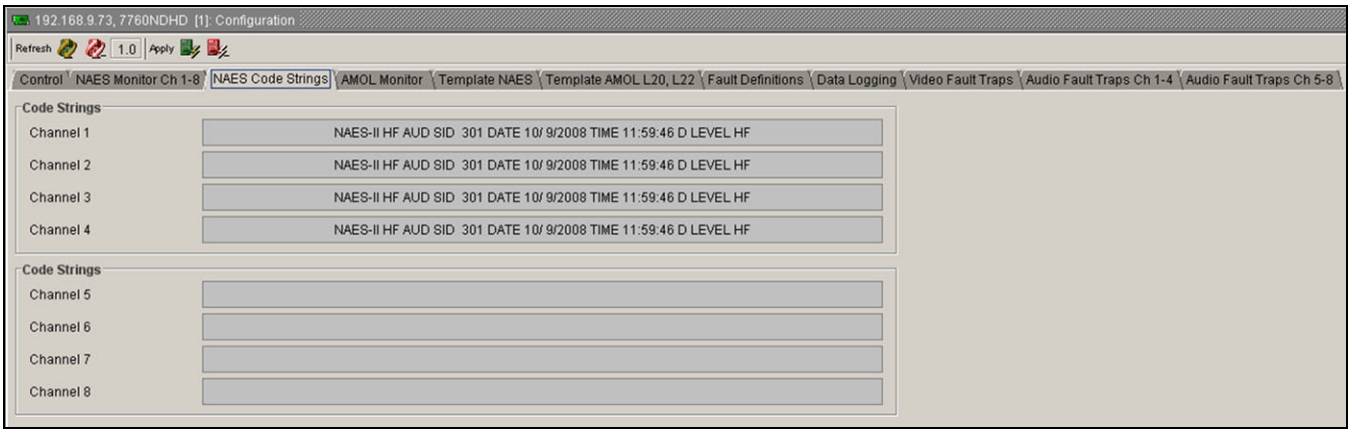

Figure 7-6: NAES Code Strings

7.1.5. AMOL Monitor

The *AMOL Monitor* tab (shown in Figure 7-7) displays the AMOL video information.

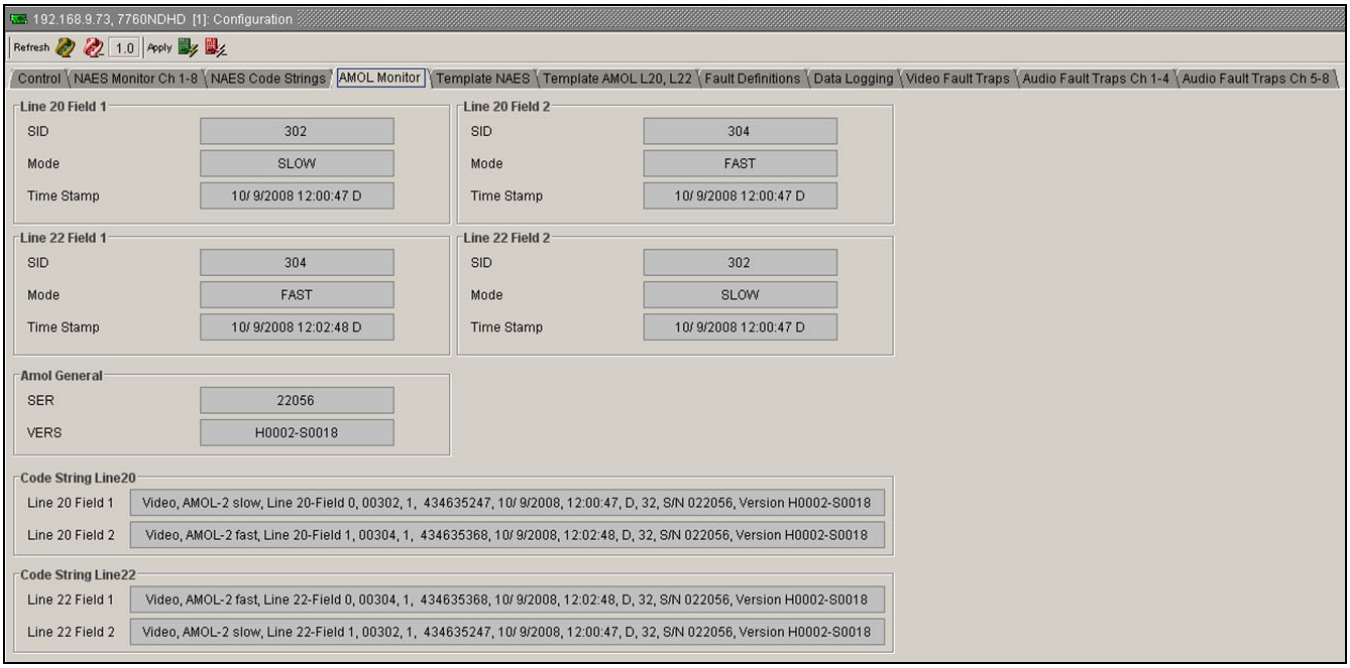

Figure 7-7: AMOL Monitor Tab

- **SID:** This field displays the Source Identifier.
- **Mode:** This field displays the AMOL mode. The mode options are Slow, Medium, and Fast.
- **Time Stamp:** This field displays time stamp (date and time) information.

- **SER:** This field displays the serial number of the AMOL General.
- **VERS:** This field displays the version number of the AMOL General.
- **Line 20 Field 1:** This field displays the code string information for Field 1 of Line 20.
- **Line 20 Field 2:** This field displays the code string information for Field 2 of Line 20.
- **Line 22 Field 1:** This field displays the code string information for Field 1 of Line 22.
- **Line 22 Field 2:** This field displays the code string information for Field 2 of Line 22.

7.1.6. Template NAES

The *Template NAES* tab enables the user to set the station identifier of the corresponding channel. Each channel of audio can be set to PC, FD, and HF. The template NAES tab enables the user to set the template reference value. All measure codes can be compared to the template value for any deviation.

See section 7.1.3 for a description of the Code Types. (For example, PC, FD, or HF)

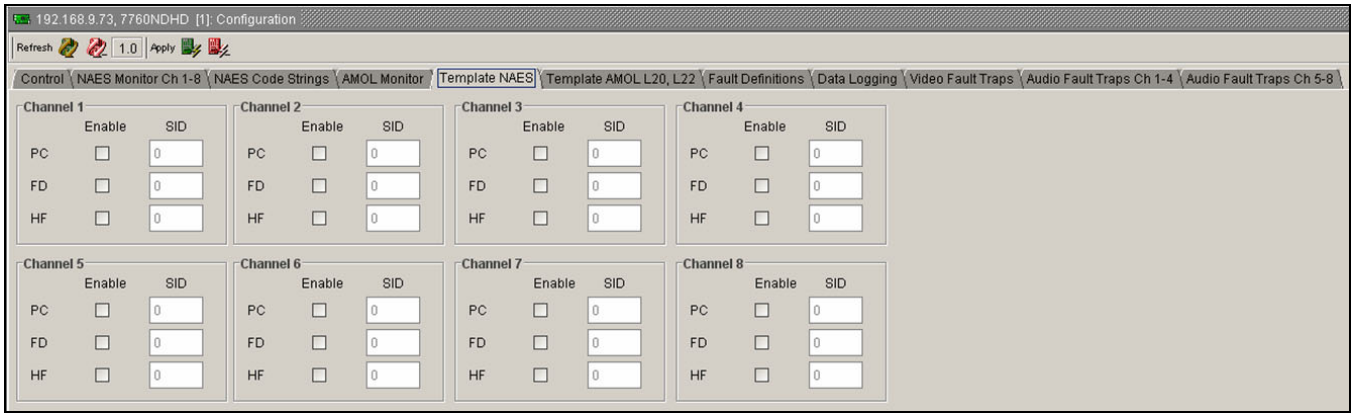

Figure 7-8: Template NAES Tab

7.1.7. Template AMOL L20, L22

The *Template AMOL L20, L22* tab enables the user to set the video version of coding.

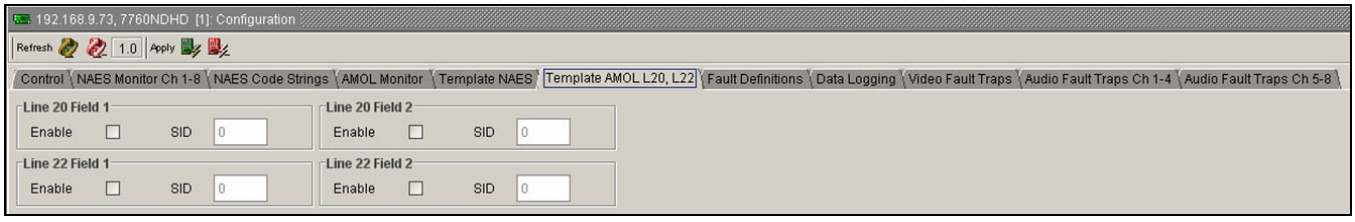

Figure 7-9: Template AMOL L20, L22

The user can set the AMOL template for Line 20 Field 1, Line 20 Field 2, Line 22 Field 1, and Line 22 Field 2.

- **Enable:** Place a check mark in the *Enable* box to enable the associated Line and Field. Once there is a check mark in the *Enable* box, the associated SID field value will no longer be greyed out and the field can be filled in.

- **SID:** This field enables the user to set the specific Source ID.

7.1.8. Fault Definitions

The *Fault Definitions* tab (shown in Figure 7-10) is used to define the faults.

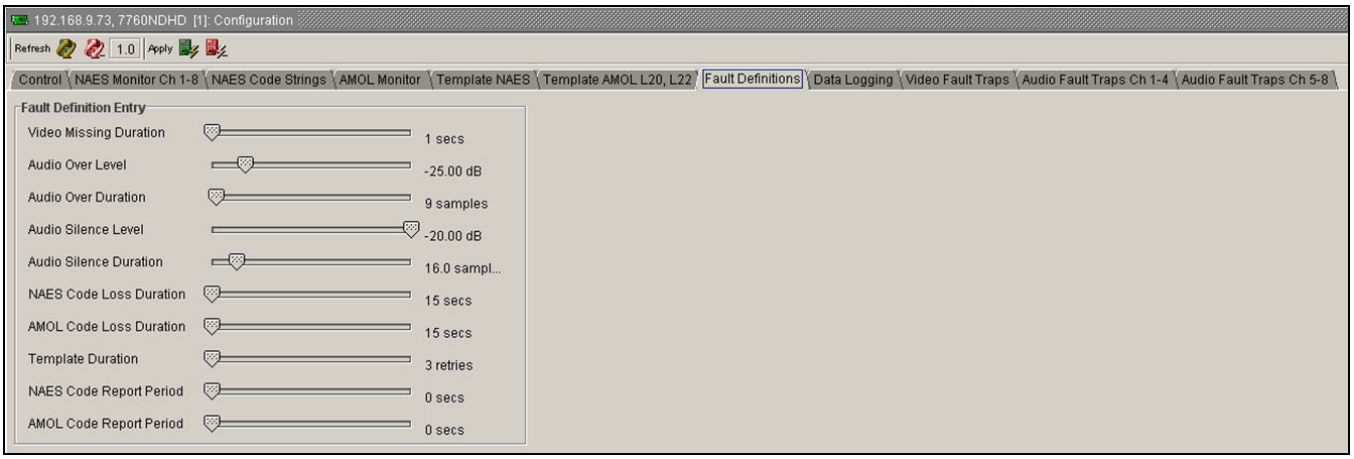

Figure 7-10: Fault Definitions Tab

- **Video Missing Duration:** This parameter enables the user to set the number of seconds that the video can be missing before the fault alarm is triggered. The *Video Missing Duration* ranges from 1 second to 30 seconds, in 1 second increments.

- **Audio Over Level:** This parameter enables the user to define the maximum audio level in dB. When the audio exceeds this level a fault alarm will be triggered. The *Audio Over Level* ranges from -30.00 dB to 0.00 dB, in 0.25 dB increments.

- **Audio Over Duration:** This parameter enables the user to define the number of samples that the audio must be over before the alarm is cleared. The *Audio Over Duration* ranges from 3 samples to 255 samples, in 1 sample increments.

- **Audio Silence Level:** This parameter enables the user to define the minimum audio level (in dB). When the audio falls below this level a fault alarm will be triggered. The *Audio Silence Level* ranges from -96.00 dB to -20.00 dB, in 0.25 dB increments.

- **Audio Silence Duration:** This parameter enables the user to define the number of samples that the audio must be under before the alarm is cleared. The Audio Silence Duration ranges from 0.5 samples to 127 samples, in 0.5 sample increments.

- **NAES Code Loss Duration:** This parameter enables the user to set the number of seconds that the NAES code can be lost before a fault alarm is triggered. The *NAES Code Loss Duration* ranges from 15 seconds to 30 seconds, in 1 second increments.

- **AMOL Code Loss Duration:** This parameter enables the user to set the duration (in seconds) that the AMOL code can be lost before a fault alarm is triggered. The *AMOL Code Loss Duration* ranges from 15 seconds to 30 seconds, in 1 second increments.

- **Template Duration:** This parameter enables the user to set the number of times the template can retry before a fault alarm will be triggered. The *Template Duration* ranges from 3 to 15 retries, in increments of 1.

- **NAES Code Report Period:** This parameter enables the user to set the period of time (in seconds) in which the reporting of monitored NAES codes will be sent to VistaLINK® PRO. This slider controls the amount of NAES data that is sent to VistaLINK® PRO. The *NAES Code Report Period* ranges from 0 seconds to 60 seconds, in 1 second increments.

- **AMOL Code Report Period:** This parameter enables the user to set the period of time (in seconds) in which the reporting of monitored AMOL codes will be sent to the VistaLINK® PRO. The slider controls the amount of AMOL data that is sent to VistaLINK® PRO. The *AMOL Code Report Period* ranges from 0 seconds to 60 seconds, in 1 second increments.

7.1.9. Data Logging

The *Data Logging* tab (shown in Figure 7-11) allows the user to enable NAES and AMOL code logging and monitor the status of each log.

The *NAES* and *AMOL Code Logging Enable* section allows the user to select whether the NAES code logging will be enabled. To enable a particular log, simply place a check mark beside the log you wish to enable. When a check mark is present, the data log is enabled. When a check mark is not present, the data log is disabled.

The *NAES* and *AMOL Code Logging Status* section defines whether a code is present or missing. If the box is green, then the corresponding code is present. If the box is red, then the corresponding code is missing.

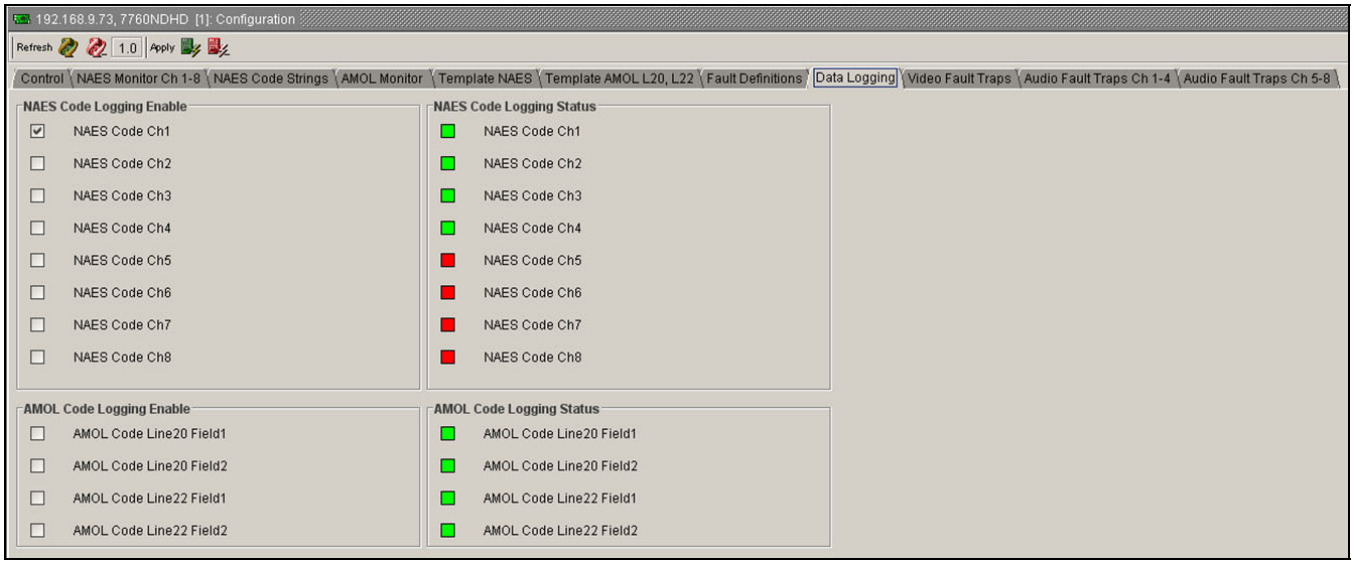

Figure 7-11: Data Logging

7.1.10. Video Fault Traps

The *Video Fault Traps* tab (shown in Figure 7-12) allows the user to enable Video Alarm Entry traps as well as monitor the trap status. By placing a check mark beside the items in these sections the user will enable a trap to alarm. The *Trap Status* section allows the user to view the status of the traps.

If the box is green in the *Video Alarm Entry Trap Status* then the video alarm is present, if it is red then the video alarm is missing.

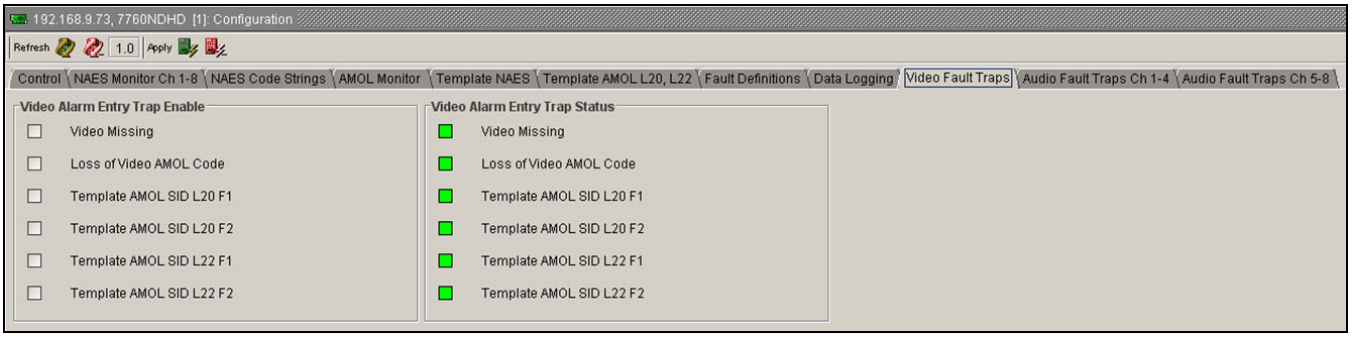

Figure 7-12: Fault Traps

7.1.11. Audio Fault Traps Ch 1-8

The *Audio Fault Traps Ch 1-4* tab and *Audio Fault Traps Ch 5-8* tab, as shown in Figure 7-13 and Figure 7-14, allow the user to enable fault traps and view the status of fault traps for Channels 1 to 8.

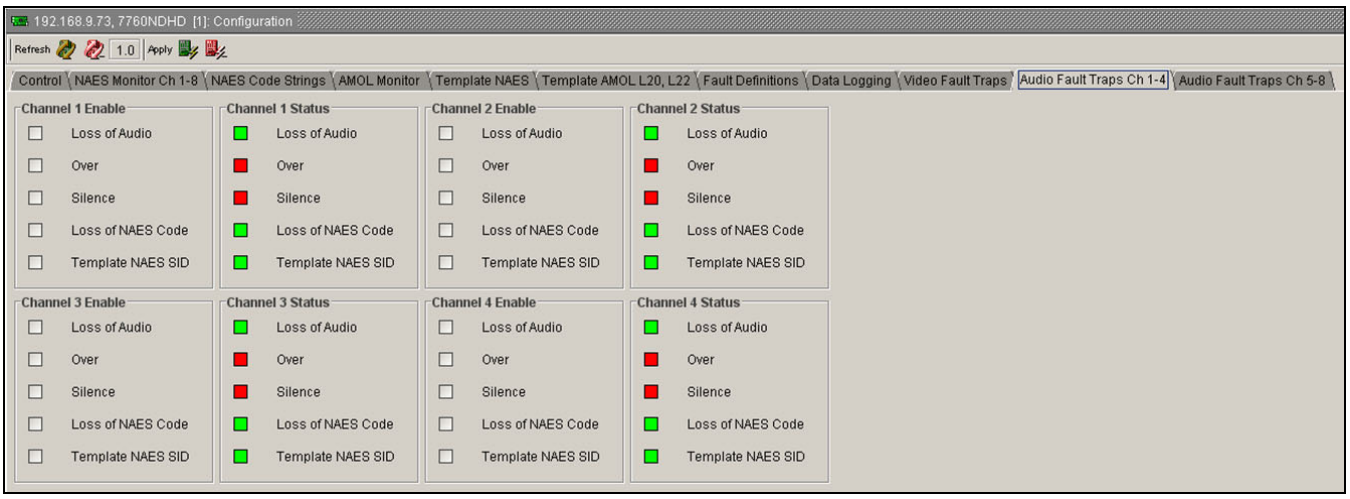

Figure 7-13: Audio Fault Traps Ch 1-4 Tab

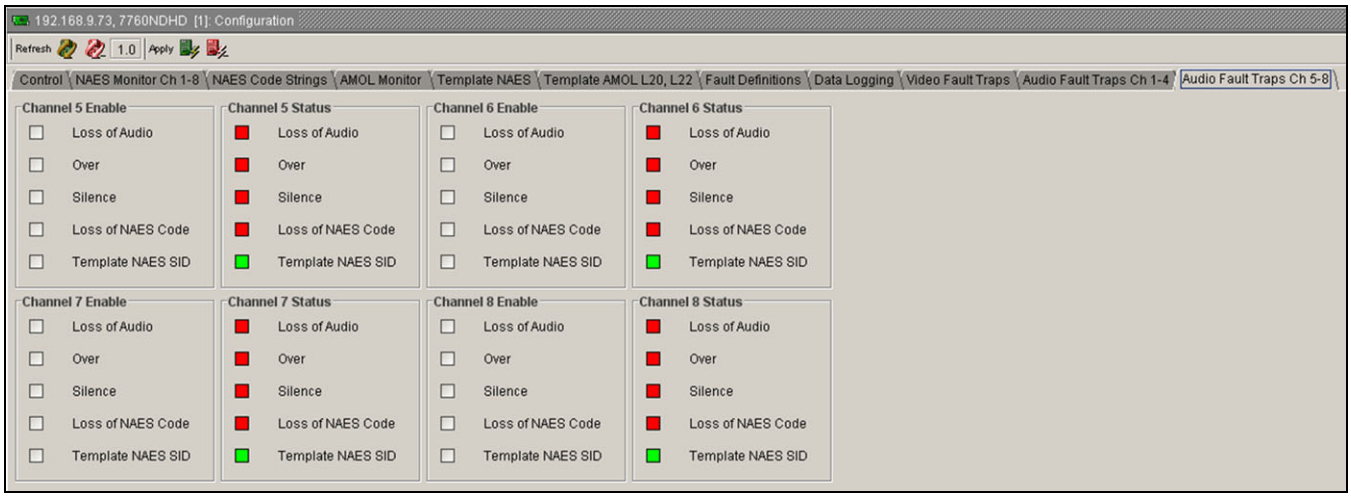

Figure 7-14: Audio Fault Traps Ch 5-8 Tab

Controls for channels 1 to 8 are accessible under these tabs; however, for the sake of brevity, only Channel 1 will be described in this manual.

The *Channel 1 Enable* section provides the user with 5 Audio Fault Trap options, which are listed below:

- **Loss of Audio:** Placing a check mark in this box will enable the *Loss of Audio* fault trap.
- **Over:** Placing a check mark in this box will enable the *Over* fault trap.
- **Silence:** Placing a check mark in this box will enable the *Silence* fault trap.
- **Loss of NAES Code:** Placing a check mark in this box will enable the *Loss of NAES Code* fault trap.
- **Template NAES SID:** Placing a check mark in this box will enable the reporting of Template mismatch for NAES SID.

The *Channel 1 Status* section displays the status of the Channel 1 parameters. The status section provides the same parameters as outlined above in the *Enable* section. The boxes corresponding to each parameter indicates whether the trap is missing or present.

- A Green status box indicates that the corresponding fault trap parameter is present.
- A Red status box indicates that the corresponding fault trap parameter is missing.

7.2. CONFIGURING THE NORTHBOUND INTERFACE USING VISTALINK® PRO

The following steps are used to activate the *Northbound* interface:

1. From the VLPRO Server's main menu, select *Tools* → *Alarm Forwarding.*
2. Select the "Summary Alarms" tab.
3. Check the "Product Summary Alarm" checkbox.
4. Select the "Add" button.
5. Provide the *IP address*, *Alias* and *Port* for the 3rd party trap receiver.
6. Click "OK" to exit.

The VistaLINK® PRO Server will immediately begin transferring the Product Summary alarms.

The VistaLINK® PRO Server MIB, which describes the Northbound "Product Summary" alarm forwarding interface, is available upon request.

8. CONFIGURING MULTI-IMAGE DISPLAY PRODUCTS

8.1. CONFIGURING 7867VIPA12, 7867VIPA8/16/32-DUO, 7867VIPX-8/16/32 DEVICES

1. Use a web browser to open the configuration page for the 7867VIPA products. Any web browser will work. Type the IP address of the VIPA you wish to setup into the address tool bar.

2. The VIPA will serve back a configuration page (see Figure 8-1). Select the Nielsen setup category from the list.

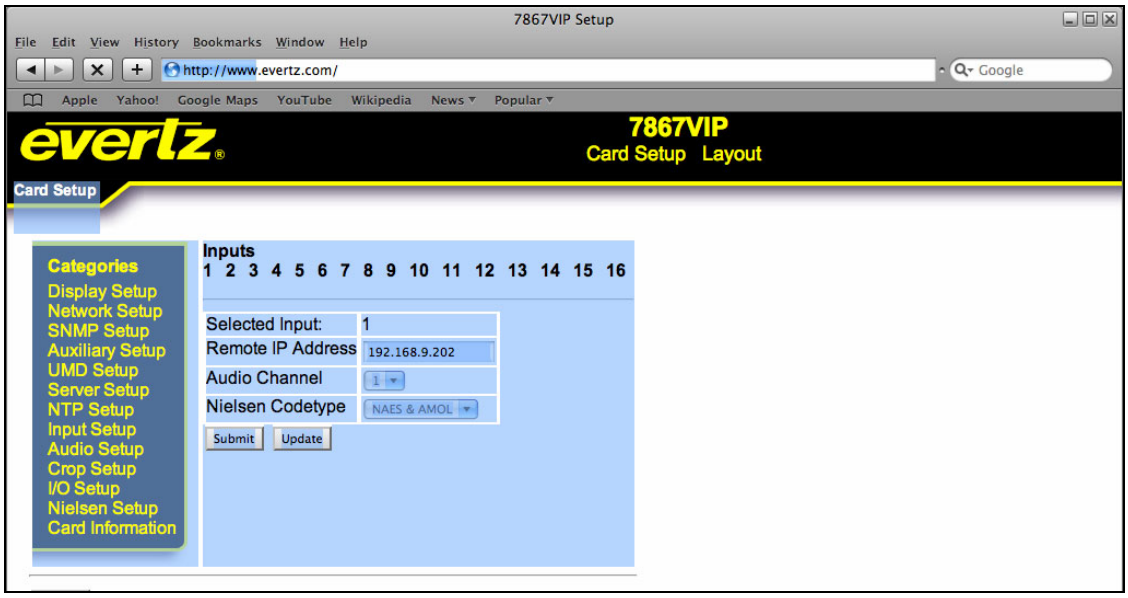

Figure 8-1: VIPA Configuration Page

3. Select the input of the VIPA that you intend to associate the Nielsen data decoded from the 7760ND-HD card.

4. Enter the 7760ND-HD's IP Address in the property box under "Remote IP Address."

5. Select which channel of audio you wish to monitor by selecting an audio channel from the drop down box.

Note: The 7760ND-HD can monitor all 8 channels of audio for NAES codes. The VIPA can only display the codes for a single channel.

6. Select which types of codes the VIPA is to display by selecting from the drop down "NAES", "AMOL", "NAES & AMOL"

7. Once form is complete click the "submit" button at the bottom of the page to send the settings to the VIPA.

8. Repeat step 1 to 6 for different inputs if monitoring more then one program.

9. Reboot the card once all inputs are configured.

8.2. CONFIGURING 7867VIPA'S / MVP OV'S USING THE SYSTEM CONFIGURATION TOOL

1. There are two system types; stand alone (on board server) and PC Server based. A single VIPA will run an "on board server." A collection of VIPAs under one system will run a "PC server." A small MVP will run an "on board server," and a large MVP system will run a "PC server". Identify which type of system is being configured and then follow the appropriate next step.

2. For "On board" server based configurations, open the System Configuration Tool (SCT). For PC based server configurations, open the *System Manager*. Please note that this may already be running. Therefore, you should start with the running software.

3. For "On board" server, enter the IP address for the VIP or MVP system into the SCT on the profiles page. Click on the "Get from Server" button at the top of the form.

4. In the *System Manager* double click on the system containing the hardware to be configured.

5. Go to the *hardware* tab and select the VIP device or OV input card to be configured. Click on the properties tab to bring up the configuration view for the hardware.

6. Select *Nielsen Monitoring* tab at the top of the form.

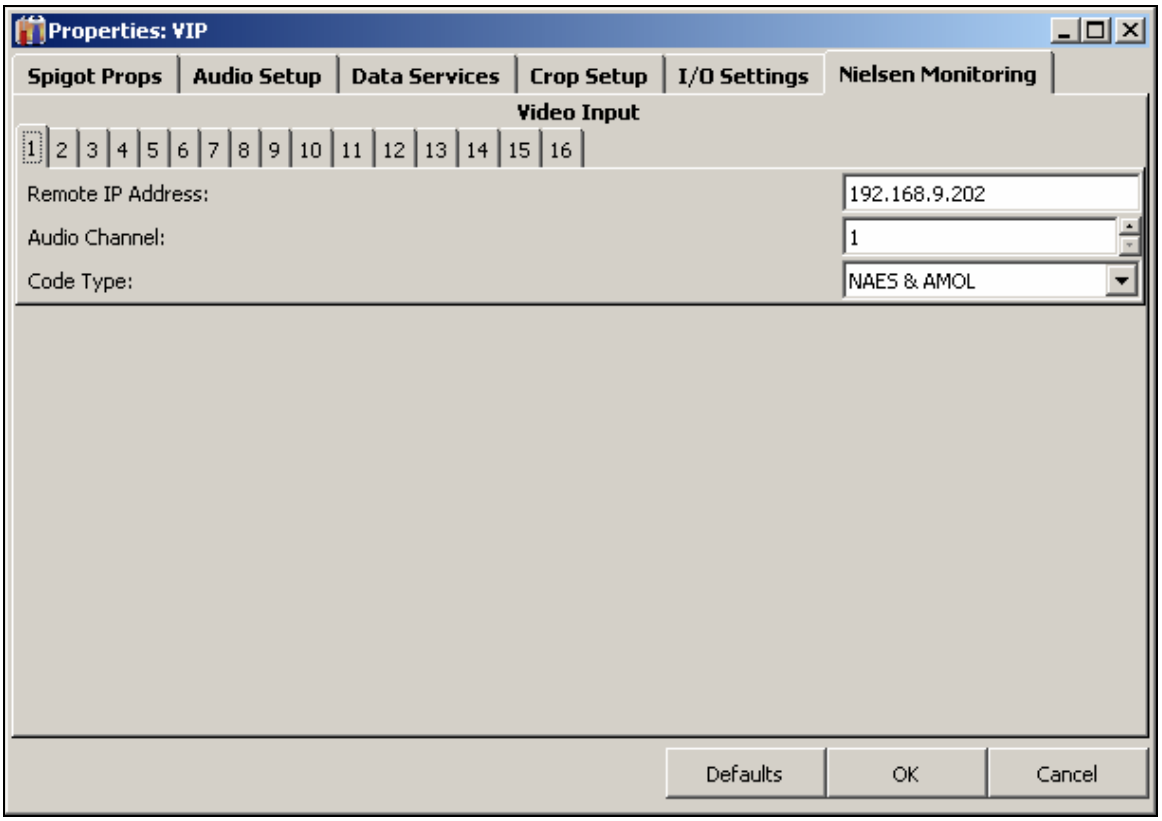

Figure 8-2: VIP Properties Sheet

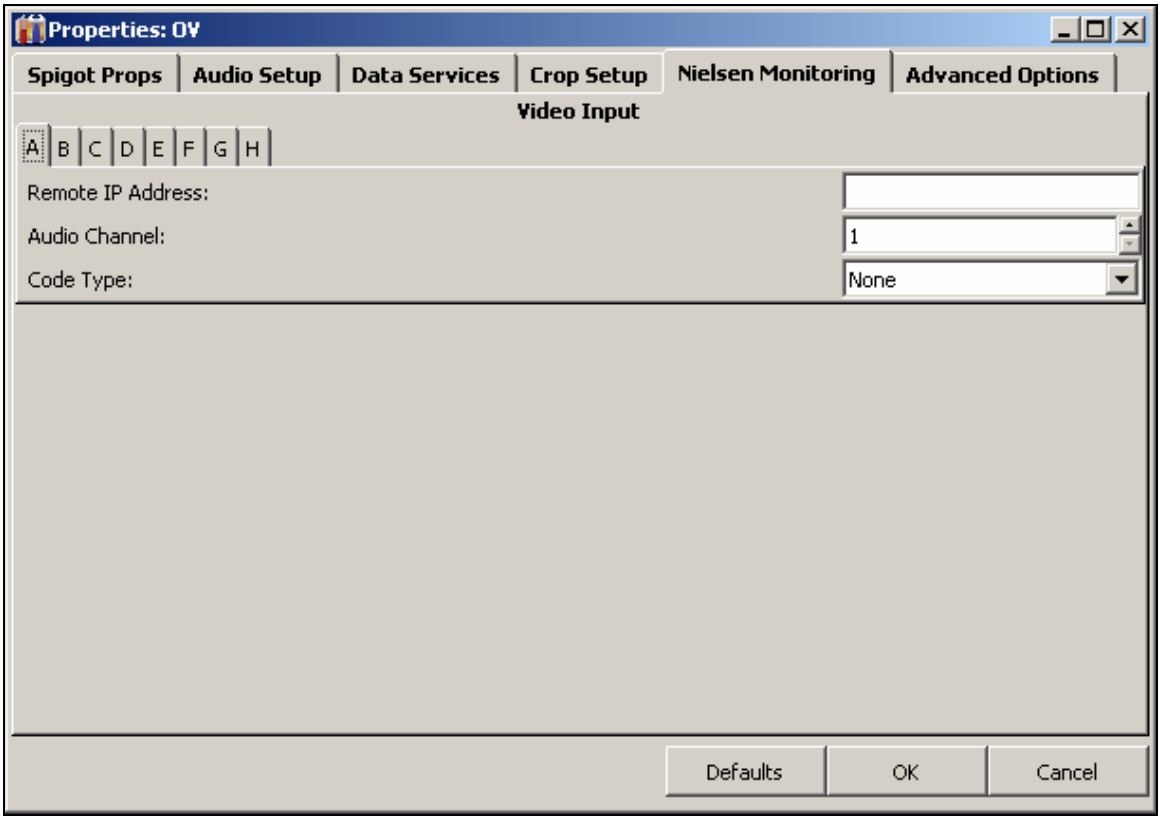

Figure 8-3: MVP OV Property Sheet

7. Select the input on the VIP or OV that the Nielsen data is to be associated to. For example, select input 1 to bring up the Nielsen Monitoring configuration view for that input.

8. Under *Remote IP Address* enter the IP Address for the 7760ND-HD card.

9. Under *Audio Channel* select which channel of audio you want the multi-viewer to display the decoded Nielsen codes from.

10. Under *Code Type* select NAES, AMOL, or Both from Nielsen Code type. This will determine what type of data can be displayed on the VIP or MVP. Please note: Only select the code type required to avoid excessive unwanted data from being sent over the network.

    Repeat step 7 to 10 for different inputs if monitoring more then one program.

11. Once all configurations are complete click the OK button at bottom of the form.

12. For “On board server,” you must upload the new config back to the card; to do this make sure the IP address is still entered in the profile page for the “On board Server” and click the *Send to Server* button. Once configuration has been uploaded the card has to be power cycled for it to take effect.

13. In the *System Manager* simply acknowledge that the server must be restarted or click “Stop” and the “Start” on the top of the form to latch the changes into the system.

9. UPGRADING FIRMWARE

To upgrade the firmware on the 7760ND-HD unit follow the procedure outlined below:

1. Ensure an Ethernet cable is plugged into the rear of the unit and the frame is powered up.

2. Open a web browser and type the IP address of the card (set in section 6) into the URL address field.

3. An upgrade page will appear as shown in Figure 9-1.

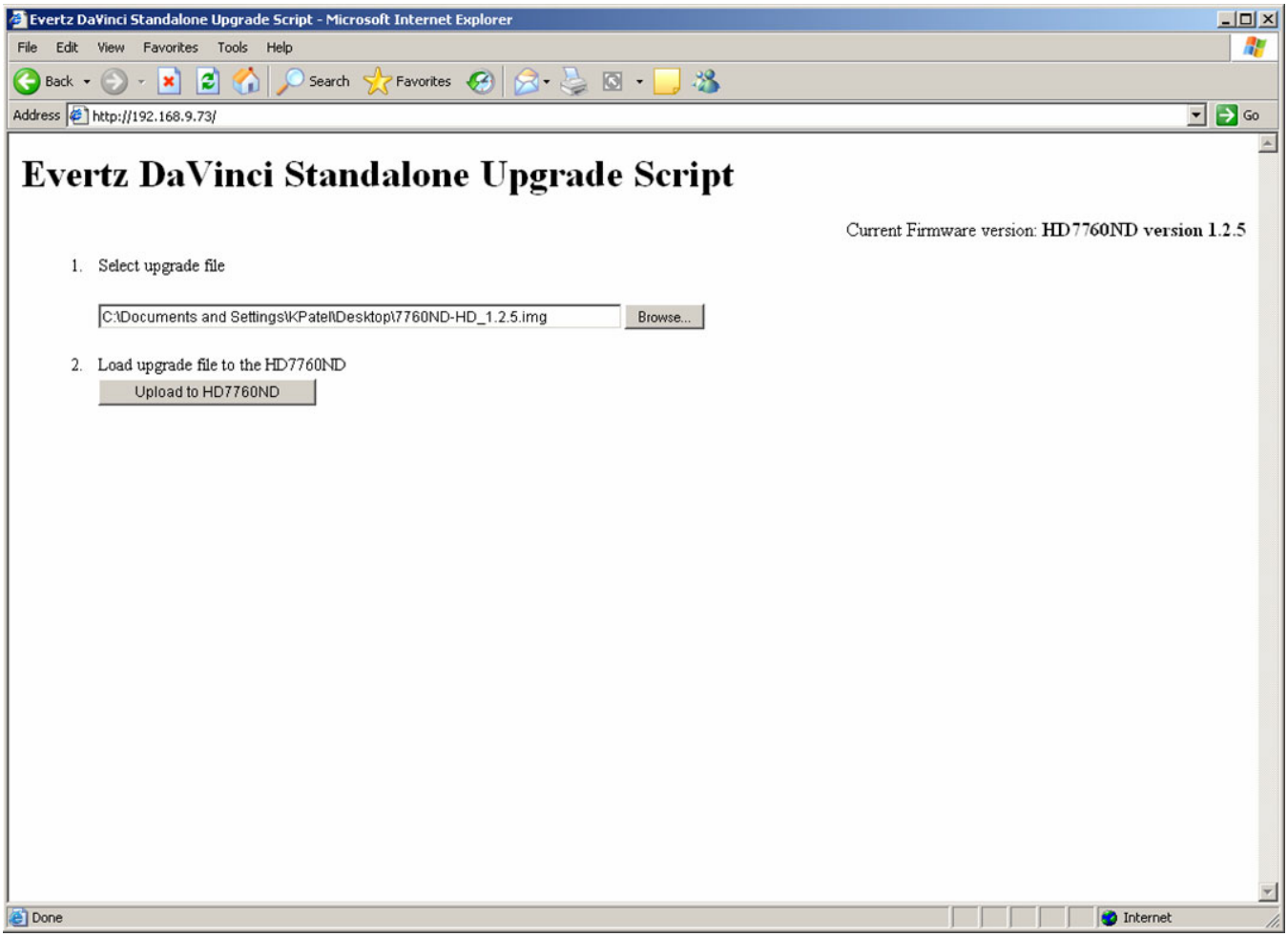

Figure 9-1: Upgrade Window

4. To load the firmware file, select the *Browse* button. A *Choose File* dialogue window will appear as shown in Figure 9-2.

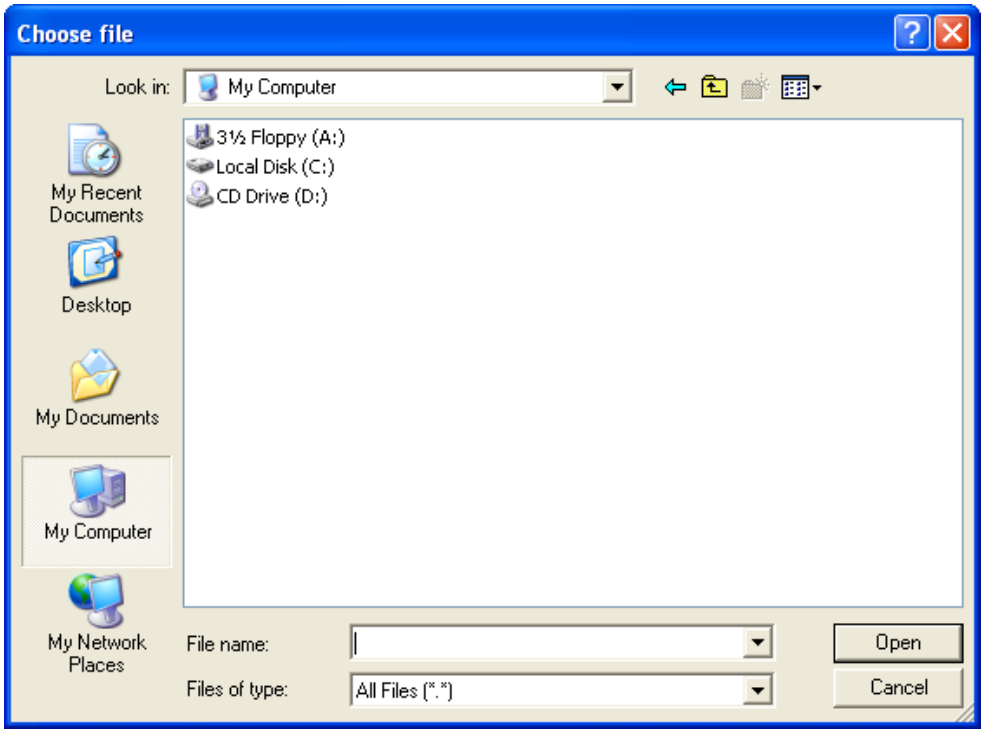

Figure 9-2: Choose File Window

5. Browse to the appropriate file and then select the *Open* button.

6. Once complete the user can close the upgrade configuration window and power cycle the unit.

Please note that the Upgrade Firmware window also displays the current version of firmware on the connected 7760ND-HD.

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