

TABLE OF CONTENTS

1.	OVE	RVIEW	1
2.	INST		3
	2.1.	VIDEO INPUT	3
	2.2.	GENERAL PURPOSE INPUTS AND OUTPUTS	 4 5
	2.3.	ETHERNET NETWORK CONNECTIONS	6
3.	TEC	HNICAL SPECIFICATIONS	7
	3.1.	INPUT SPECS	7
	3.2.	OUTPUT SPECS	7
	3.3.	CARD STATUS	7
	3.4.	ELECTRICAL	7
	3.5.	PHYSICAL	7
4.	CAR	D EDGE CONTROLS	8
	4.1.	AUDIO STATUS LEDS	9
5.	JUM	PER CONTROLS	10
	5.1.	SELECTING WHETHER LOCAL FAULTS WILL BE	
		MONITORED BY THE GLOBAL FRAME STATUS	10
	5.2.	CONFIGURING THE MODULE FOR FIRMWARE UPGRADES	10
6.	CON	IFIGURATION SETUP	11
7.	CON	IFIGURING USING VISTALINK®	16
	7.1.	WHAT IS VISTALINK®?	16
		7.1.1. Setting Up VISTALINK _®	16
		7.1.2. Control Tab	10
		7.1.4. NAES Code Strings	20
		7.1.4. NAES Code Strings 7.1.5. AMOL Monitor	20 20
		 7.1.4. NAES Code Strings 7.1.5. AMOL Monitor 7.1.6. Template NAES 	20 20 21
		 7.1.4. NAES Code Strings 7.1.5. AMOL Monitor 7.1.6. Template NAES 7.1.7. Template AMOL L20, L22 7.1.8 Fault Definitions 	20 20 21 21 21
		 7.1.4. NAES Code Strings 7.1.5. AMOL Monitor 7.1.6. Template NAES 7.1.7. Template AMOL L20, L22 7.1.8. Fault Definitions 7.1.9. Data Logging 	20 20 21 21 22 23
		 7.1.4. NAES Code Strings 7.1.5. AMOL Monitor 7.1.6. Template NAES 7.1.7. Template AMOL L20, L22 7.1.8. Fault Definitions 7.1.9. Data Logging 7.1.10. Video Fault Traps 	20 20 21 21 22 23 24
		 7.1.4. NAES Code Strings 7.1.5. AMOL Monitor	20 21 21 22 23 24 24



8.	CON	NFIGURING MULTI-IMAGE DISPLAY PRODUCTS	27
	8.1.	CONFIGURING 7867VIPA12, 7867VIPA8/16/32-DUO, 7867VIPX- 8/16/32 DEVICES	27
	8.2.	CONFIGURING 7867VIPA'S / MVP OV'S USING THE SYSTEM CONFIGURATION TOOL	
9.	UPG	GRADING FIRMWARE	30



Figures

Figure 1-1: 7760ND-HD Block Diagram1Figure 2-1: 7760ND-HD Rear Panel3Figure 2-2: GPI Input Circuitry4Figure 2-3: GPI Output Circuitry4Figure 2-4: GPI and GPO Connections5Figure 4-1: Card Edge Controls8Figure 6-1: Main Setup Menu11Figure 6-2: Network Setup Menu12Figure 6-3: Trap Setup Menu13Figure 6-4: Show All Trap Destinations13Figure 6-5: VIP/MVP Setup Window14Figure 6-6: Setting the VIP/MVP Destination Address15Figure 7-1: Select View Configuration17Figure 7-2: Main Configuration Screen17Figure 7-4: Video Standard Drop Down Menu18Figure 7-5: NAES Monitor Ch 1-8 Tab.19Figure 7-7: AMOL Monitor Tab20

Figure 7-2: Main Configuration Screen	17
Figure 7-3: Control Tab	18
Figure 7-4: Video Standard Drop Down Menu	18
Figure 7-5: NAES Monitor Ch 1-8 Tab	19
Figure 7-6: NAES Code Strings	20
Figure 7-7: AMOL Monitor Tab	20
Figure 7-8: Template NAES Tab	21
Figure 7-9: Template AMOL L20, L22	21
Figure 7-10: Fault Definitions Tab	22
Figure 7-11: Data Logging	23
Figure 7-12: Fault Traps	24
Figure 7-13: Audio Fault Traps Ch 1-4 Tab	24
Figure 7-14: Audio Fault Traps Ch 5-8 Tab	25
Figure 8-1: VIPA Configuration Page	27
Figure 8-2: VIP Properties Sheet	28
Figure 8-3: MVP OV Property Sheet	29
Figure 9-1: Upgrade Window	30
Figure 9-2: Choose File Window	31

Tables

Table 1-1: Nielsen Data	a Availability	2
Table 4-1: Audio Group) Status LEDs	9



REVISION HISTORY

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

Information contained in this manual is believed to be accurate and reliable. However, Evertz assumes no responsibility for the use thereof nor for the rights of third parties, which may be affected in any way by the use thereof. Any representations in this document concerning performance of Evertz products are for informational use only and are not warranties of future performance, either expressed or implied. The only warranty offered by Evertz in relation to this product is the Evertz standard limited warranty, stated in the sales contract or order confirmation form.

Although every attempt has been made to accurately describe the features, installation and operation of this product in this manual, no warranty is granted nor liability assumed in relation to any errors or omissions unless specifically undertaken in the Evertz sales contract or order confirmation. Information contained in this manual is periodically updated and changes will be incorporated into subsequent editions. If you encounter an error, please notify Evertz Customer Service department. Evertz reserves the right, without notice or liability, to make changes in equipment design or specifications.



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.





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 100\muA 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_ $_{\odot}$ 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.
I	Green	Group present with channel 1.
n	Off	Group not present with channel 2.
2	Green	Group present with channel 2.
2	Off	Group not present with channel 3.
3	Green	Group present with channel 3.
4	Off	Group not present with channel 4.
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.

aco2 Pass	login: customer word:
Welc	ome to MontaVista(R) Linux(R) Professional Edition 4.0 (0501140).
	***** :*******************************
	Evertz Microsystems Ltd. 2008
	**** Main Menu ****
(1) (2) (3)	Network Setup SNMP Setup 7760ND-HD Setup
(4) (5)	Engineering Debug Tool Command Line Debug Tool
(X) (W)	Exit Exit without saving to flash
>∎	

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.
- 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.

 *1	**** Network Setup ****							
(1) (2) (3) (4)	IP Address Netmask Gateway Broadcast	[192.168.245.20] [255.255.192.0] [192.168.192.10] [192.168.245.255]						
(X)	Exit							
>_x								

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.



	Add Twee Destination
	Haa Irap Destination Remove Tran Destination
35	Show All Trap Destinations
	*
(X)	Exit
> 1 > Ente	er IP of New Destination: 192.168.8.100

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.

```
**** Trap Setup Menu ****
(1)
       Add Trap Destination
       Remove Trap Destination
(2)
(3)
      Show All Trap Destinations
(X)
      Exit
> 3
Trap #1: 192.168.8.16
Trap #2: 192.168.8.100
Trap #3: NONE
Trap #4: NONE
Trap #5: NONE
Trap #6: NONE
Trap #7: NONE
Trap #8: NONE
```

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.





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.



	**** Main Menu ****
(1)	Network Setup
(2)	SNMP Setup
(3)	7760ND-HD Setun
(4)	Engineering Debug Tool
255	Command Line Debug Tool
137	Command Line Debug 1001
(8)	Fyit
205	Exit without cawing to flach
⟩ x Change	es are saved!
Montal aco2 I	Jista(R) Linux(R) Professional Edition 4.0 (0501140) login: ∎

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 $_{\odot}$ 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 $_{\ensuremath{\mathbb{S}}}$ server, enter *administrator* for the username and leave the password blank.

To access the VistaLINK $_{\odot}$ 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 $VistaLINK_{\odot}$.



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.

SVistaLINK PRO - 7760NDHD [1]										
<u>F</u> ile T <u>r</u> ee <u>A</u> larm <u>C</u> o	onfiguration	Au <u>d</u> it	<u>P</u> reset	Tools	<u>W</u> indow	<u>H</u> elp				
Tree 🔁 🧞 🐔 🛛 Mews 🛙	õ 🔍 🐴									
🐠 Navigation Tree										
Configurations										
⊡ 🛥 192.168.8.150										
T760NDHD	View Al	larm	_							
	🔍 View <u>C</u>	onfigura	tion							
	Save		,	-						
	Load)	•						
	Inhibit			-						
	Sleep									
	<u>C</u> onfigu	re Alarn	1S							
	Up <u>d</u> ate	Descrip	tion							
	Create	<u>S</u> ervice	.)	•						
	Upgrad	e Firmw	are	-						
		_								

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.

📟 192.168.9.73, 7760NDHD [1]: Configuration				
Refresh 🛷 🗞 1.0 Apply 峰 🎉				
Control VAES Monitor Ch 1-8 VAES Code Strings AMOL Monitor V	emplate NAES	Template AMOL L20, L22 \Fault Definitions \Data Logging	Video Fault Traps \ Audi	o Fault Traps Ch 1-4 🔨 Audio Fault Traps Ch 5-8 🚶
	Decode From	n Audio		
Input Video Standard Status SD 525i/59.94	Ch 1	O Disable 💿 Enable		
Input Video Standard SD 525i/59.94	Ch 2	🔿 Disable 💿 Enable		
	Ch 3	◯ Disable ④ Enable		
	Ch 4	O Disable ④ Enable		
	Ch 5	 Disable O Enable 		
	Ch 6	 Disable O Enable 		
	Ch 7	 Disable O Enable 		
	Ch 8	 Disable O Enable 		

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:

SD 525i/59.94 👻
SD 525i/59.94
SD 625i/50
HD 1080i/59.94
HD 720p/59.94
HD 1080i/50
HD 720p/50

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.

🎟 192.168.9.73, 7760NDHD [1]: Configuration			
Refresh 🧞 🗞 1.0 Apply 🌉	: 📲 🏒			
Control NAES Monitor Ch 1-8	NAES Code Strings AMOL Monitor	Template NAES Template AMOL L	.20, L22 \Fault Definitions \Data Logo	ing $\sqrt[]{Video Fault Traps } Audio Fault Traps Ch 1-4 \sqrt[]{Audio Fault Traps Ch 5-8 }$
Channel 1		Channel 2		
SID Code Value	301	SID Code Value	301	
Time Stamp		Time Stamp		
Code Type (Level)	HF	Code Type (Level)	HF	
Channel 3		Channel 4		
SID Code Value	301	SID Code Value	301	
Time Stamp		Time Stamp		
Code Type (Level)	HF	Code Type (Level)	HF	
Channel 5		Channel 6		
SID Code Value	0	SID Code Value	0	
Time Stamp		Time Stamp		
Code Type (Level)	PC	Code Type (Level)	PC	
Channel 7		Channel 8		
SID Code Value	0	SID Code Value	0	
Time Stamp		Time Stamp		
Code Type (Level)	PC	Code Type (Level)	PC	
L				

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.

📟 192.168.9.73, 7760NDHD [1	I]: Configuration							
Refresh 🧞 🗞 1.0 Apply 🌉	₽ /_							
Control VNAES Monitor Ch 1-8	NAES Code Strings AMOL Mor	itor \Template NAES	Template AMOL L20, L22	Fault Definitions	Data Logging	Video Fault Traps	Audio Fault Traps Ch 1-4	4 \ Audio Fault Traps Ch 5-8 \
Code Strings								
Channel 1	NAES-II HF	AUD SID 301 DATE 10	/ 9/2008 TIME 11:59:46 D LE	EVEL HF				
Channel 2	NAES-II HF	AUD SID 301 DATE 10	/ 9/2008 TIME 11:59:46 D LE	EVEL HF				
Channel 3	NAES-II HF	AUD SID 301 DATE 10	/ 9/2008 TIME 11:59:46 D LE	EVEL HF				
Channel 4	NAES-II HF	AUD SID 301 DATE 10	/ 9/2008 TIME 11:59:46 D LE	EVEL HF				
Code Strings								
Channel 5								
Channel 6								
Channel 7								
Channel 8								

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.

192.168.9.73, 73	60NDHD [1]: Configuration			
Refresh 🧞 🗞 1.	0 Apply 🌉 🌉			
Control NAES Mo	nitor Ch 1-8 (NAES Code Strings) AMOL Monitor	Template NAES Template A	MOL L20, L22 \Fault Definitions \Data Logg	ing $\sqrt{Video Fault Traps }$ Audio Fault Traps Ch 1-4 $\sqrt{Audio Fault Traps Ch 5-8 }$
Line 20 Field 1		Line 20 Field 2		
SID	302	SID	304	
Mode	SLOW	Mode	FAST	
Time Stamp	10/ 9/2008 12:00:47 D	Time Stamp	10/ 9/2008 12:00:47 D	
Line 22 Field 1		Line 22 Field 2		
SID	304	SID	302	
Mode	FAST	Mode	SLOW	
Time Stamp	10/ 9/2008 12:02:48 D	Time Stamp	10/ 9/2008 12:00:47 D	
Amol General				
SER	22056			
VERS	H0002-S0018			
Code String Line2	0			_
Line 20 Field 1	Video, AMOL-2 slow, Line 20-Field 0, 00302, 1,	434635247, 10/ 9/2008, 12:00:4	7, D, 32, S/N 022056, Version H0002-S0018	
Line 20 Field 2	Video, AMOL-2 fast, Line 20-Field 1, 00304, 1,	434635368, 10/ 9/2008, 12:02:4	8, D, 32, S/N 022056, Version H0002-S0018	
Code String Line2	2			
Line 22 Field 1	Video, AMOL-2 fast, Line 22-Field 0, 00304, 1,	434635368, 10/ 9/2008, 12:02:4	8, D, 32, S/N 022056, Version H0002-S0018	
Line 22 Field 2	Video, AMOL-2 slow, Line 22-Field 1, 00302, 1,	434635247, 10/ 9/2008, 12:00:4	17, D, 32, S/N 022056, Version H0002-S0018	
1.0				

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)

192.16	68.9.73, 776	0NDHD [1]: C	onfiguratio	n ////////////////////////////////////										
Refresh 凝	2 🧞 1.0	Apply 时	<u>.</u>											
Control	NAES Mon	itor Ch 1-8 \ N/	AES Code S	Strings \ AM	IOL Monitor	Template NA	S Tem	plate AMOL L	20, L22 \ Fa	ult Definitions	Cata Logging	Video Fault Traps	Audio Fault Traps Ch 1-4	Audio Fault Traps Ch 5-8
Channel	1		Channel	2		Channel	;		Chann	el 4				
	Enable	SID		Enable	SID		Enable	SID		Enable	SID			
PC		0	PC		0	PC		0	PC		0			
FD		0	FD		0	FD		0	FD		0			
HF		0	HF		0	HF		0	HF		0			
Channel	5		Channel	6		Channel 7			Chann	el 8				
	Enable	SID		Enable	SID		Enable	SID		Enable	SID			
PC		0	PC		0	PC		0	PC		0			
FD		0	FD		0	FD		0	FD		0			
HF		0	HF		0	HF		0	HF		0			

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.

192.168.9.73, 7760NDHD [1]: Configuration		
Refresh 🧞 🗞 1.0 Apply 🌉 🎉		
Control NAES Monitor Ch 1-8 NAES Code Strings AMOL Monitor	Template NAES Template AMOL L20, L22 Fault Defi	nitions 🕻 Data Logging 🕻 Video Fault Traps 🕻 Audio Fault Traps Ch 1-4 🕻 Audio Fault Traps Ch 5-8 🚶
Line 20 Field 1		
Enable 🗌 SID 0 Enable 🗌	SID 0	
Line 22 Field 1		
Enable SID 0 Enable 🗆	SID 0	

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.

📟 192.168.9.73, 7760NDHD	1]: Configuration							
Refresh 🧞 🗞 1.0 Apply 💐	: 📕							
Control NAES Monitor Ch 1-8	NAES Code Strings \AMOL Monitor	Template NAES	Template AMOL L20, L22	Fault Definitions 👔	Data Logging Video	Fault Traps \Audio	Fault Traps Ch 1-4	Audio Fault Traps Ch 5-8
Fault Definition Entry								
Video Missing Duration		1 secs						
Audio Over Level		-25.00 dB						
Audio Over Duration		9 samples						
Audio Silence Level		-20.00 dB						
Audio Silence Duration		16.0 sampl						
NAES Code Loss Duration		15 secs						
AMOL Code Loss Duration		15 secs						
Template Duration	Ø	3 retries						
NAES Code Report Period		0 secs						
AMOL Code Report Period	Ø	0 secs						

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

7700 MultiFrame Manual 7760ND-HD Nielsen Universal Reader



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.

📟 192.168.9.73, 7760NDHD [1]: Configuration	
Refresh 🧞 🗞 1.0 Apply 🌉 🌉	
Control NAES Monitor Ch 1-8 NAES Code Strings AMOL Monitor	Template NAES Template AMOL L20, L22 Fault Definitions Data Logging Video Fault Traps Audio Fault Traps Ch 1-4 Audio Fault Traps Ch 5-8
Video Alarm Entry Trap Enable	_Video Alarm Entry Trap Status
Video Missing	Video Missing
Loss of Video AMOL Code	Loss of Video AMOL Code
Template AMOL SID L20 F1	Template AMOL SID L20 F1
Template AMOL SID L20 F2	Template AMOL SID L20 F2
Template AMOL SID L22 F1	Template AMOL SID L22 F1
Template AMOL SID L22 F2	Template AMOL SID L22 F2

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.

192.168.9.73 ,	7760NDHD [1]: Configu											
Refresh 🧞 🙋	1.0 Apply 🔐 🙀											
Control NAES N	fonitor Ch 1-8 \NAES Co	ode Strings \AMOL Monitor	Template N	AES \ Template AM	40L L20, L2	2 \Fault Definitions	Cata Logging	Video Fault Traps	Audio Fault Tra	ps Ch 1-4 Audio Fau	ult Traps Ch 5	.8 \
Channel 1 Enabl	Chan	nel 1 Status	Channel 2 E	nable	Channe	el 2 Status						
Loss of	Audio	Loss of Audio	Los	s of Audio		Loss of Audio						
Over Over		Over	Ove	¢		Over						
Silence	•	Silence	Sile Sile	nce		Silence						
Loss of	NAES Code	Loss of NAES Code	Los	s of NAES Code		Loss of NAES Code						
Templat	te NAES SID	Template NAES SID	🗌 Ten	plate NAES SID		Template NAES SID						
Channel 3 Enabl	e Chani	nel 3 Status	Channel 4 E	nable	Channe	el 4 Status						
Loss of	Audio	Loss of Audio	Los	s of Audio		Loss of Audio						
Over Over		Over	Ove	r .		Over						
Silence		Silence	Sile Sile	nce		Silence						
Loss of	NAES Code	Loss of NAES Code	Los	s of NAES Code		Loss of NAES Code	•					
Templat	te NAES SID	Template NAES SID	🗌 Ten	plate NAES SID		Template NAES SID						
Over Silence Loss of Templat Loss of Over Silence Loss of Over Silence Loss of Templat	NAES Code	Over Silence Loss of NAES Code Template NAES SID Nel 3 Status Loss of Audio Over Silence Loss of NAES Code Template NAES SID	Ove Sile Los Channel 4 E Ove Sile Ove Sile Los Ove Sile Los Ten	nce s of NAES Code uplate NAES SID vable s of Audio r nce s of NAES Code uplate NAES SID	Channe B B B Channe B B Channe B B Channe Ch	Over Silence Loss of NAES Code Template NAES SIE Loss of Audio Over Silence Loss of NAES Code Template NAES SIE	2) 2					

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



192	.168.9.73, 7760NDHD [1]:	Configuration			
Refresh	🧞 🗞 1.0 Apply 🌌 🛙	1 /2			
Contro	I NAES Monitor Ch 1-8	NAES Code Strings AMOL Monitor	Template NAES Template AM	DL L20, L22 \Fault Definitions \Data L	ogging (Video Fault Traps (Audio Fault Traps Ch 1-4) Audio Fault Traps Ch 5-8)
Chanr	nel 5 Enable	Channel 5 Status	Channel 6 Enable	Channel 6 Status	
	Loss of Audio	Loss of Audio	Loss of Audio	Loss of Audio	
	Over	Over	Over Over	Over 📕	
	Silence	Silence	Silence	Silence	
	Loss of NAES Code	Loss of NAES Code	Loss of NAES Code	Loss of NAES Code	
	Template NAES SID	Template NAES SID	Template NAES SID	Template NAES SID	
Chanr	nel 7 Enable	Channel 7 Status	Channel 8 Enable	Channel 8 Status	
	Loss of Audio	Loss of Audio	Loss of Audio	Loss of Audio	
	Over	Over	Over Over	Over	
	Silence	Silence	Silence	Silence	
	Loss of NAES Code	Loss of NAES Code	Loss of NAES Code	Loss of NAES Code	
	Template NAES SID	Template NAES SID	Template NAES SID	Template NAES SID	
L					

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* \rightarrow *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 $_{\ensuremath{\$}}$ 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.

7867VIP Setup		
File Edit View History Bookmarks Window Help		
X + Ohttp://www.evertz.com/	• Q- Google	
□ Apple Yahoo! Google Maps YouTube Wikipedia News ▼ Popular ▼		
Card Setup Card Setup		
Card Setup		
Categories Inputs Display Setup 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16		
Network Setup SNMP Setup Auxiliary Setup Selected Input: 1 Remote IP Address 192.168.9.202		
Audio Channel		
Input Setup Audio Setup		
Crop Setup VO Setup		
Nielsen Setup Card Information		

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.

- 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.

moperties: \	/IP					
Spigot Props	Audio Setup	Data Services	Crop Setup	I/O Settings	Nielsen Monitori	ing
1 2 3 4 5	6 7 8 9 10	11 12 13 14 1	Video Input			
Remote IP Addre	:55:				192.168.9.202	
Audio Channel:					1	* *
Code Type:					NAES & AMOL	-
				Defaults	ок	Cancel

Figure 8-2: VIP Properties Sheet



moperties:	DV					<u>_ ×</u>
Spigot Props	Audio Setup	Data Services	Crop Setup	Nielsen Monito	oring Adva	anced Options
			Video Input			
ABCDE	FGH					
Remote IP Addre	ess:					
Audio Channel:					1	*
Code Type:					None	•
					(
				Defaults	ок	Cancel

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.

🚰 Evertz Da¥inci Standalone Upgrade Script - Microsoft Internet Explorer	
File Edit View Favorites Tools Help	
😋 Back 🔹 🕥 - 💌 😰 🔥 🔎 Search 🦙 Favorites 🚱 🔗 🌭 🔯 🗉 📒 🖓	
Address 🙋 http://192.168.9.73/	🗾 🔁 😡
Evertz DaVinci Standalone Upgrade Script	
	Current Firmware version: HD7760ND version 1.2.5
1. Select upgrade file	
C:\Documents and Settings\KPate\\Desktop\7760ND-HD_1.2.5.img Browse	
2. Load upgrade file to the HD7760ND	
Upload to HD7760ND	
	*
Done 2010	S Internet

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.



Choose file		? 🔀
Look in:	💡 My Computer 💽 🗢 🛍 🕍	
My Recent Documents Desktop	월 3½ Floppy (A:) ☞ Local Disk (C:) ② CD Drive (D:)	
My Documents		
My Computer		
My Network Places	File name:	Open
T Idees	Files of type: All Files (*.*)	Cancel

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.



This page left intentionally blank