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REVISION HISTORY

REVISION	DESCRIPTION	DATE
1.0	Initial Release	Jan 08
1.1	Added VistaLINK® screen shots	Jan 08
1.2	Updated Status Indicator LEDs information	Oct 09

WARNING

Never look directly into an optical fiber. Non-reversible damage to the eye can occur in a matter of milliseconds.

Do not hook up the 7707CVT-4 series DWDM cards and any 7707CVR-4 series cards directly with a short fiber optic cable. The 7707CVT-4 series DWDM card produces +7dBm of power, which will damage the receiver if connected directly.

Do not hook up the 7707CVT-4 series cards that output more than -7dBm of power (see 7707CVT-4 series specifications for output power of various laser types) and 7707CVR-4 series high sensitivity (-H versions) receiver cards directly with a short fiber optic cable. The 7707CVT-4 series cards that produce more than -7dBm of power will damage the receiver if connected directly.

1. OVERVIEW

The 7707CVR-4 is a VistaLINK® enabled, Quad Analog Video fiber receiver for broadcast video quality signals. This single card module accepts a fiber optic input, demultiplexes the signals, performs D to A conversion and outputs NTSC or PAL analog video. The companion 7707CVT-4 Quad Analog Video fiber transmitter digitizes and multiplexes the analog video and converts them to an optical signal for transmission.

The 7707CVR-4-A16 Dual Composite Video and Analog Audio fiber receiver is a version that accepts a fiber optic input, demultiplexes the signals, performs D to A conversion, and outputs 4 NTSC or PAL analog video signals and up to 16 balanced analog audio signals. The companion 7707CVT-4-A16 Quad Analog Video and 16 Analog Audio fiber transmitter digitizes and multiplexes 4 analog video and up to 16 analog audio signals and converts them to an optical signal for transmission.

The 7707CVR-4 occupies one card slot and the 7707CVR-4-A16 occupies two card slots. Both can be housed in either a 1RU frame which will hold up to three modules, or a 3 RU frame which will hold up to 15 single slot modules.

Features:

- Single card fiber optic receiver for up to four analog video and 16 analog audio signals (7707CVR-4-A16) only
- Supports both NTSC and PAL video signals
- Broadcast quality analog video and audio performance
- Meets or exceeds EIA/TIA RS250-C short haul specifications for analog video transport
- Adjustable gain, DC offset and pre-emphasis for up to 250m of Belden 1694 coaxial cable
- Comprehensive signal and status monitoring via four-digit card-edge display, or through SNMP and *Vista*LINK® enabled capability
- *Vista*LINK® capability is available when modules are used with the 3RU 7700FR-C frame and a 7700FC *Vista*LINK® Frame Controller module in slot 1 of the frame
- Fully Hot-swappable from front of frame with no fiber disconnect/reconnect required
- Supports Single mode (8-10 μm) and Multi-mode (50/62.5 μm) fiber optic cable
- Accepts any wavelength in the 1270nm to 1610nm range

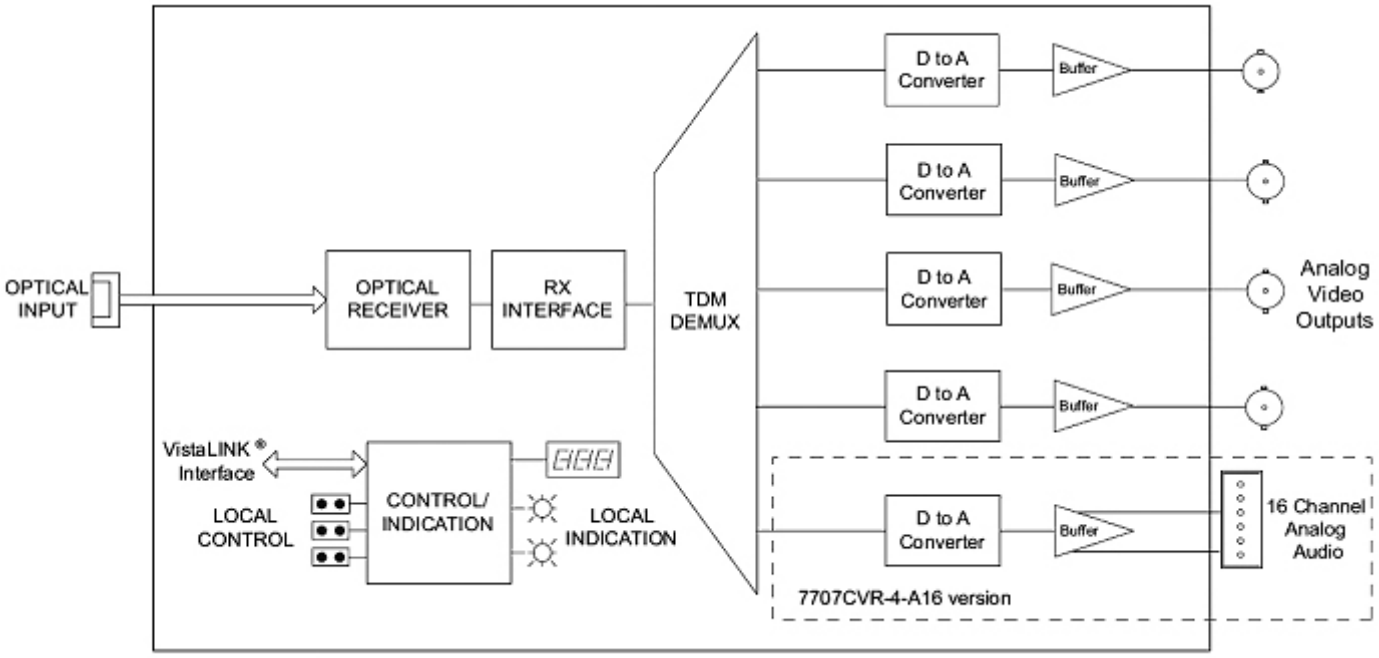

Figure 1-1: 7707CVR-4 and 7707CVR-4-A16 Block Diagram

2. INSTALLATION

The 7707CVR-4 comes with a companion rear plate that has four BNC connectors and one SC/PC, ST/PC or FC/PC optical connector. Additionally the 7707CVR-4-A16 has one 48-pin terminal header with removable terminal block. For more information on mounting the rear plate and inserting the module into the frame see section 3 of the 7700FR chapter.

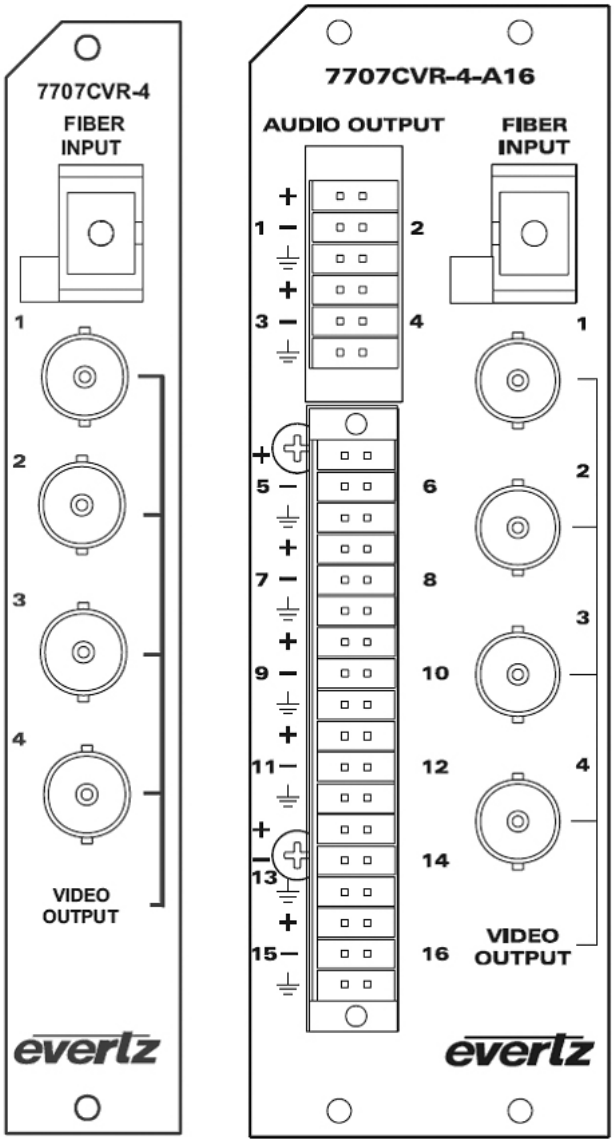

Figure 2-1: 7707CVR-4 and 7707CVR-4-A16 Rear Panels

FIBER INPUT: SC/PC, ST/PC or FC/PC female connector. This wide range input accepts optical wavelengths of 1270nm to 1610nm for standard, CWDM or DWDM transmission schemes.

Do not hook up the 7707CVT-4 series DWDM cards and any 7707CVR-4 series cards directly with a short fiber optic cable. The 7707CVT-4 series DWDM card produces +7dBm of power, which will damage the receiver if connected directly.

Do not hook up the 7707CVT-4 series cards that output more than -7dBm of power (see 7707CVT-4 series specifications for output power of various laser types) and 7707CVR-4 series high sensitivity (-H versions) receiver cards directly with a short fiber optic cable. The 7707CVT-4 series cards that produce more than -7dBm of power will damage the receiver if connected directly.

ANALOG VIDEO OUTPUTS

1 to 4: On the 7707CVR-4 series there are four composite analog video outputs. Each output can have cable pre-emphasis applied independently.

AUDIO OUTPUTS: The 7707CVR-4-A16 modules provide terminal block output connections compatible with either balanced or unbalanced analog audio. Balanced audio signals should be connected to the positive (+) and negative (-) output terminals. Unbalanced audio signals should be connected to the positive (+) output terminal, while the negative (-) output terminal remains unconnected. The audio cables can be secured into the removable portion of the terminal strips using a small screwdriver. The removable part of the terminal strip is then inserted into the rear panel.

2.1. CARE AND HANDLING OF OPTICAL FIBER

Never touch the end face of an optical fiber. Always keep dust caps on optical fiber connectors when not connected and always remember to properly clean the optical end face of a connector before making a connection.

The transmission characteristics of the fiber are dependent on the shape of the optical core and therefore care must be taken to prevent fiber damage due to heavy objects or abrupt fiber bending. Evertz recommends that you maintain a minimum bending radius of 5 cm to avoid fiber-bending loss that will decrease the maximum attainable distance of the fiber cable. The Evertz fiber optic modules come with cable lockout devices, to prevent the user from damaging the fiber by installing a module into a slot in the frame that does not have a suitable I/O module. For further information on the care and handling of fiber optic cable see section 3 of the Fiber Optics System Design chapter in the front of the binder.

3. SPECIFICATIONS

3.1. OPTICAL INPUT

Number of Inputs: 1
Connector: Female SC/PC, SC/PC with cover flap, ST/PC or FC/PC
Operating Wavelength: 1270nm to 1610nm
Max. Input Power:
Standard: 0dBm
High Sensitivity (-H): -7dBm
Optical Sensitivity
Standard: -25dBm
High Sensitivity (-H): -30dBm

3.2. ANALOG VIDEO OUTPUTS

Standard: NTSC, SMPTE 170M or PAL, ITU-R624-4
Number of Outputs: 4
Connector: 1 BNC per IEC 61169-8 Annex A
System bandwidth: 5.5 MHz
Output Level: 1 Vp-p nominal, 2 Vp-p maximum
Gain: Unity Gain nominal, adjustable 50% to 150%
Output Impedance: 75 Ohms
Return Loss: > 20 dB
SNR: > 72dB
Differential Gain: < 1.0%
Differential Phase: < 0.7Degrees
Pre-Emphasis: cable loss compensation for up to 250m of Belden 1694 (each output adjustable separately)
Passband Ripple:
NTSC: < +/- 0.1dB to 4.1 MHz
< +/- 0.2dB to 5.5 MHz
PAL: < +/- 0.1dB to 4.8 MHz
< +/- 0.2dB to 5.8 MHz
Chroma/Luma Gain: 98% to 103%
Chroma/Luma Delay:
NTSC: < 5 ns
PAL: < 12 ns
Line Time Distortion: 1.2%

3.3. ANALOG AUDIO OUTPUTS

Number of Outputs: 4
Type: Balanced analog audio
Connector: 48-pin removal terminal block
Output impedance: 66Ω

Freq. Response:	+/-0.1 dB, 20Hz to 20 kHz
THD 20Hz–20Khz:	< 0.005%
Channel Phase Diff.	+/-1 degree
SNR (weighted):	> 85 dB
Output Level Adj:	-20 dB to +3 dB
Max Output Level:	+24 dBu into 10 kΩ loads

3.4. ELECTRICAL

Voltage:	+12VDC
Power:	12 Watts.
EMI/RFI:	Complies with FCC regulations for class A devices Complies with EU EMC directive

3.5. PHYSICAL

7700 or 7701 frame mounting:

Number of slots:	1 (7707CVR-4) 2 (7707CVR-4-A16)

4. STATUS INDICATORS AND DISPLAYS

The 7707CVR-4 has 7 LED Status indicators and a 4 digit alphanumeric display on the front card edge to show operational status of the card at a glance. The card edge pushbutton and toggle switch are used to select various displays on the alphanumeric display. Figure 5-1 shows the location of the LEDs and card edge controls.

4.1. STATUS INDICATOR LEDS

Two large LEDs on the front of the board indicate the general health of the module:

LOCAL FAULT: This Red LED indicates poor module health and will be On during the absence of a valid optical link to a 7707CVT-4 module, 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.

MODULE OK: This Green LED indicates good module health. It will be On when a valid optical link to a 7707CVT-4 module is present, and board power is good.

There are five small LEDs on the back side of the board that indicate the presence of video (above the detection level) and optical link (see section Figure 5-1).

OPTICAL LINK: This Green LED indicates that an optical link is established.

VIDEO 1 PRESENT: This Green LED indicates the presence of a valid signal on the Video 1 output. This Red LED indicates that Video 1 output is blocked.

VIDEO 2 PRESENT: This Green LED indicates the presence of a valid signal on the Video 2 output. This Red LED indicates that Video 2 output is blocked.

VIDEO 3 PRESENT: This Green LED indicates the presence of a valid signal on the Video 3 output. This Red LED indicates that Video 3 output is blocked.

VIDEO 4 PRESENT: This Green LED indicates the presence of a valid signal on the Video 4 output. This Red LED indicates that Video 4 output is blocked.

4.2. DOT-MATRIX DISPLAY

Additional signal and status monitoring and control over the card's parameters are provided via the 4-digit alphanumeric display located on the card edge (see Figure 5-1). The card edge toggle switch is used to select whether you are displaying status from the card (monitoring mode) or setting control parameters for the card (control mode).

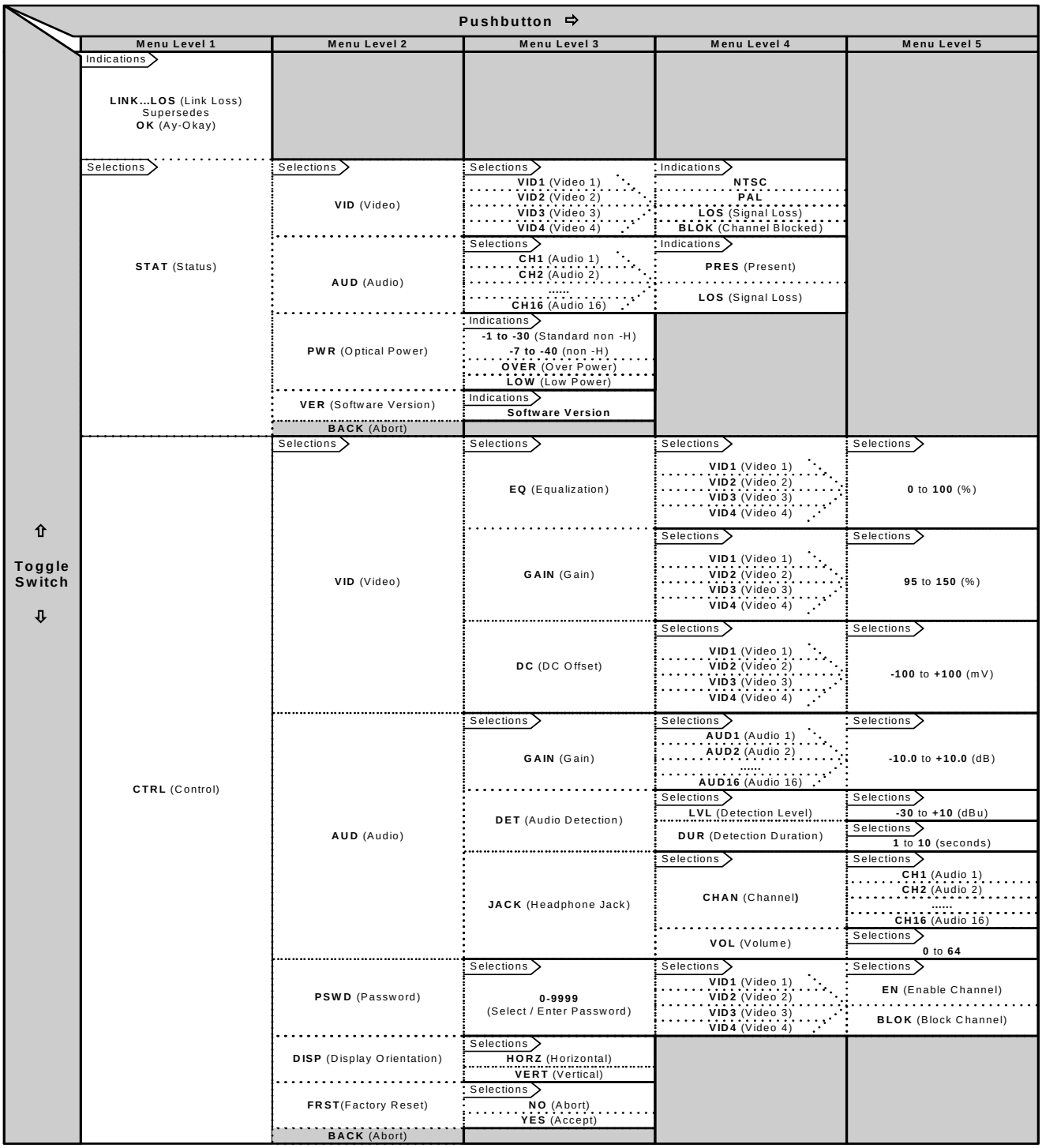

Figure 4-1: Card Edge Menu Structure

If a specific menu selection has a configuration value associated with it, then this may be changed using the toggle switch. Pressing the pushbutton will apply the displayed value and return you to the previous menu level.

The most recent user selection will be maintained in non-volatile memory in the event of power loss to the module.

4.2.1. Display of Warning Status Indications

The top level, default display indicates overall card status and warnings:

OK	Card is functioning properly
LINK…LOSS	No valid optical link established between the 7707CVT-4 and the 7707CVR-4 Flashing alternates between LINK and LOSS

Pressing the pushbutton from this default display will allow the user to select from **STAT** (status) and **CTRL** (control) menu items.

4.2.2. Displaying the Video Standard

The 7707CVR-4 detects the video standard of the signals present at its inputs. To display the video standard, select the **STAT** menu item in menu level 1, select **VID** from menu level 2, then use the toggle switch to display the desired video channel (from **VID1** to **VID4**) and press the pushbutton to select it. For the sake of simplicity, only the VID1 menu item will be described in the manual.

- *STAT*
  - *VID*
    - *VID1*
      - *NTSC*
      - *PAL*
      - *LOS*
      - *BLOK*

The video standard will be displayed from the list below:

NTSC displays that NTSC is present.
PAL displays that PAL is present.
LOS displays that there is a Loss of Signal.
BLOK displays that there is a Channel Block.

4.2.3. Displaying the Audio Presence (7707CVR-4-A16 Only)

The 7707CVR-4-A16 detects analog audio at the outputs. To display the audio presence, select the **STAT** menu item in menu level 1, select **AUD** from menu level 2, then use the toggle switch to display the desired audio channel (from **CH1** to **CH16**) and press the pushbutton to select it. For the sake of simplicity, only the CH1 menu item will be described in the manual.

- *STAT*
  - *AUD*
    - *CH1*
      - *PRES*
      - *LOS*

The audio presence will be displayed from the list below:

PRES displays that the audio is present.
LOS displays that the audio is lost.

4.2.4. Displaying the Optical Power

The 7707CVR-4 module can measure and display the input optical power over a range of -1dBm to –40dBm at increments of 1dBm for the standard version and -7dBm to –40dBm in 1dBm increments for the –H version. To display the input optical power, select the **STAT** menu item in menu level 1, then use the toggle switch to display the **PWR** option and press the pushbutton to select it.

STAT
- *PWR*
  - *OVER*
  - *-1 to –30*
  - *-7 to –40*
  - *LOW*

The display will show one of the following:

OVER	Indicates optical input power exceeding –1dBm for standard version and -7dBm for "–H" version
-1 to -30	Optical input power within this range (Standard Version).
-7 to -40	Optical input power within this range (-H Version).
LOW	Input optical power low (< -40 dBm)

4.2.5. Displaying the Firmware Version

The **VER** option displays the card's current firmware version. To display the firmware version, select the **STAT** menu item in menu level 1 then use the toggle switch to display the **VER** option and press the pushbutton to select it.

STAT
- *VER*
  - *(software version)*

The firmware version will scroll across the display.

For example: **VER 1.0 BLD 067**

4.2.6. Setting the Video Pre-emphasis

The *EQ* controls are used to set the amount of pre-emphasis being applied at the video output(s). It can be adjusted to compensate for various output cable lengths to achieve a flat frequency curve. The display shows a range of approximate cable length values expressed in meters for Belden 1694 cable or equivalent. When set to 0 the video pre-emphasis is turned off.

To set cable pre-emphasis, select the **CTRL** menu item in menu level 1, select **VID** from menu level 2, then select **EQ**. Use the toggle switch to select the desired video channel pre-emphasis (from **VID1** to **VID4**) and press the pushbutton to select it. Use the toggle switch to set the pre-emphasis value of **VID1** to **VID4**. For the sake of simplicity, only the VID1 menu item will be described in the manual.

CTRL
- *VID*
  - *EQ*
    - *VID1*
      - *0 to 100*

This control selects the amount of pre-emphasis that is applied at the video output(s).

0 to **100%** Pre-emphasis range, describing a % value

4.2.7. Setting the Video Gain

The *Gain* control is used to set the gain of the video output on the 7707CVR-4 and 7707CVR-4-A16. The display shows a range of gain values expressed as a percentage.

Note: The values other than 100 are approximate only.

To set the Gain, select the **CTRL** menu item in menu level 1, select **VID** from menu level 2, then select **GAIN**. Use the toggle switch to select the desired video channel gain (from **VID1** to **VID4**) and press the pushbutton to select it. Use the toggle switch to set the gain value of **VID1** to **VID4**. For the sake of simplicity, only the VID1 menu item will be described in the manual.

CTRL
- *VID*
  - *GAIN*
    - *VID1*
      - *95 to 150*

This control enables the user to set the gain of the video output.

95 to **150%** Video Gain range, describing a % value

4.2.8. Setting the DC Offset

The *DC Offset* control is used to set the DC offset level of the video output on the 7707CVR-4 and 7707CVR-4-A16. The display shows a range of offset values from 0 Volts, expressed in millivolts.

To set the DC Offset, select the **CTRL** menu item in menu level 1, select **VID** from menu level 2, then select **DC**. Use the toggle switch to select the desired video channel DC offset (from **VID1** to **VID4**) and press the pushbutton to select it. Use the toggle switch to set the gain value of **VID1** to **VID4**.

CTRL
- *VID*
  - *DC*
    - *VID1*
      - *-100 to +100*

This control enables the user to set the DC offset level of the video output.

-100 to **+100** DC Offset range, describing a mV (millivolt) value

4.2.9. Setting the Audio Gain (7707CVR-4-A16 Only)

The *Gain* controls (1 to 16) set the audio volume of each channel level expressed in dB. The volume level can be adjusted in 0.5 dB increments.

To set the Audio Gain, select the **CTRL** menu item in menu level 1, select **AUD** from menu level 2, then select **GAIN**. Use the toggle switch to select the desired audio channel gain (from **AUD1** to **AUD16**) and press the pushbutton to select it. Use the toggle switch to set the gain value of **AUD1** to **AUD16**. For the sake of simplicity, only AUD1 will be described in the manual.

CTRL
AUD
GAIN
AUD1
-10.0 to +10.0

This control enables the user to set the audio volume of each channel level.

-10 to **+10** Gain level range, describing a dBu value

4.2.10. Setting the Analog Audio Detection Threshold (7707CVR-4-A16 Only)

In order to properly indicate audio signal presence, a detection threshold is used. The audio detection threshold adjustment is implemented in the digital domain. The specified range of threshold adjustment is –30dBu to +10dBu, in 1dB increments. Threshold adjustment is done using the card-edge interface or through *Vista*LINK® control.

To change the audio detection threshold, use the pushbutton to select the **CTRL** menu item in menu level 1, then use the pushbutton to select **AUD** from menu level 2. Use the pushbutton to select **DET** in menu level 3**,** then **LVL** from menu level 4.

The toggle switch may then be used to change the threshold value. Use the toggle switch to select the desired value then press the pushbutton to apply the displayed selection and return to menu level 3.

CTRL
AUD
DET
LVL
-30 to +10

This control enables the user to set the analog audio detection threshold.
-30 to **+10** Detection threshold range, describing a dBu value

The factory default configuration applies an audio detection threshold value of 0dBu.

4.2.11. Setting the Analog Audio Silence Duration Period (7707CVR-4-A16 Only)

In order to properly indicate audio signal presence, a silence duration period is used. The duration period adjustment is implemented in the digital domain. The specified range of time adjustment is 1sec to 10sec, in 1sec increments. Duration adjustment is done using the card-edge interface or through *Vista*LINK® control.

To change the audio silence duration period, use the pushbutton to select the **CTRL** menu item in menu level 1, then use the pushbutton to select **AUD** from menu level 2. Use the pushbutton to select **DET** in menu level 3, then **DUR** from menu level 4.

The toggle switch may then be used to change the duration value. Use the toggle switch to select the desired value then press the pushbutton to apply the displayed selection and return to menu level 3.

CTRL
AUD
DET
DUR
1 to 10

This control enables the user to set the detection duration.

1 to **10** silence duration period range in seconds

4.2.12. Selecting the Headphone Jack Channel and Volume (7707CVR-4-A16 Only)

The 7707CVR-4-A16 provides a convenient audio monitoring headphone jack at the card-edge. This jack can be used to verify signal presence or content for each audio channel, and is enabled while specific menu items are selected within the **JACK** menu. The selected audio channel is applied to left and right headphone outputs as a monaural signal. Headphone jack channel and volume are selectable via the card-edge interface.

To configure the headphone jack, use the pushbutton to select the **CTRL** menu item in menu level 1, then use the pushbutton to select **AUD** from menu level 2. Use the pushbutton to select **JACK** in menu level 3.

CTRL
- *AUD*
  - *JACK*
    - *CHAN*
      - *CH1*
      - *CH2*
      - *…*
      - *CH16*

The 7707CVR-4-A16 allows the user to control the headphone monitoring jack channel. Use the toggle switch then pushbutton to choose the parameter to be controlled.

CHAN Allows selection of the headphone monitoring channel.

The following list describes possible selections for the headphone monitoring channel:

CH1 to **CH16** is the range of audio channels for the 7707CVR-4-A16 product version.

Press the pushbutton to apply the displayed section. A scrolling line segment will be displayed. The headphone jack will be enabled while in this state. Pressing the pushbutton again will exit this state, and mute the headphone jack.

CTRL
- *AUD*
  - *JACK*
    - *VOL*
      - *0 to 64*

The 7707CVR-4-A16 allows the user to control the headphone monitoring jack volume. Use the toggle switch then pushbutton to choose the parameter to be controlled.

VOL Allows selection of headphone monitoring volume.

Upon selecting the **VOL** menu item, a line segment is displayed. The position of the line-segment on the dot-matrix display indicates the configured volume, and can be adjusted via the toggle switch. The headphone jack will be enabled while in this state. Pressing the pushbutton will exit this state, and mute the headphone jack.

4.2.13. Setting the Password for Channel Blocking and Selecting Channels to be Blocked

The 7707CVR-4-A16 allows selective blocking of video channels 1 to 4 with a password. The default password is **7154**.

To view the menu for channel blocking, use the pushbutton to select the **CTRL** menu item in menu level 1, then use the pushbutton to select **PSWD** from menu level 2. Use the toggle switch to cycle through password **0…9999**. Use the pushbutton to enter the password shown on the display in menu level 3.

- *CTRL*
  - *PSWD*
    - *0-9999*
      - *VID1*
      - *VID2*
      - *VID3*
      - *VID4*
        - *EN*
        - *DIS*

In menu level 4 use the toggle switch and then pushbutton to select the following:

PWSL	Enter a new password **0…9999**
VID1	Select Video Input 1
VID2	Select Video Input 2
VID3	Select Video Input 3
VID4	Select Video Input 4

To enable or disable blocking, select the video channel (**VID1 to VID4**) menu item in menu level 4. Use the toggle switch to set the blocking parameter in menu level 5 of **VID1** to **VID4** individually.

EN	Enable Channel
BLOK	Block Channel

Without the correct password, the blocking or enable setting of each channel cannot be changed. The current Block or Enable status can only be viewed in menu level 5.

4.2.14. Setting the Orientation of the Text on the Card Edge Display

The **DISP** display option allows the user to set a horizontal or vertical orientation for the card edge display messages. To set the display orientation, select the **CTRL** menu item in menu level 1, then use the toggle switch to display the **DISP** menu selection and use the pushbutton to select it. Use the toggle switch to change between **HOR** and **VERT**. Press the pushbutton to make your selection.

- *CTRL*
  - *DISP*
    - *HORZ*
    - *VERT*

This control enables the user to select the display orientation.

HOR Horizontal display used when the module is housed in the 1 rack unit 7701FR frame or the stand-alone enclosure.

VERT Vertical display used when the module is housed in the 3-rack unit 7700FR frame.

4.2.15. Resetting Factory Defaults

The **FRST** menu option will return the 7707VT-4-HS to factory defaults. To return all settings to factory defaults, select the **CTRL** menu item in menu level 1, then use the toggle switch to display the **FRST** menu selection and use the pushbutton to select it. Use the toggle switch to change between **YES** and **NO**. Press the pushbutton to make your selection.

- *CTRL*
  - *DISP*
    - *YES*
    - *NO*

This control enables the user to reset the setting to factory default.

YES Return all card settings to factory default.

NO Retain current settings. Abort the factory reset operation.

5. JUMPERS

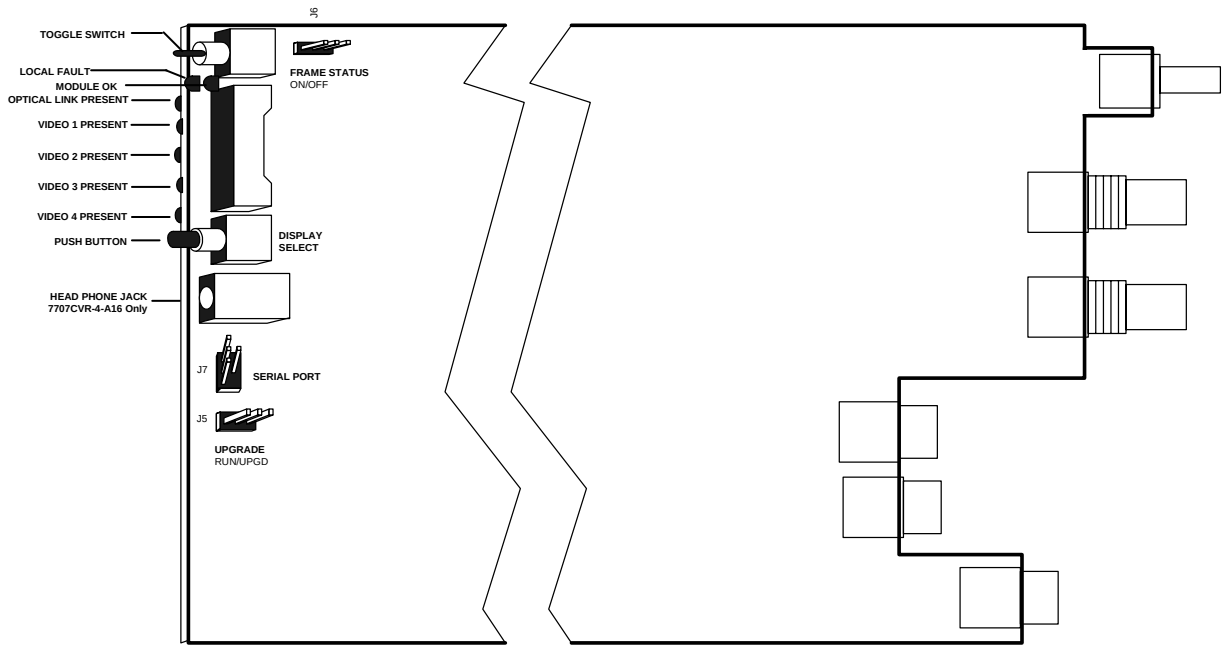

Figure 5-1: Location of Jumpers and Card Edge Controls

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

The FRAME STATUS jumper J4 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

UPGRADE: The UPGRADE jumper J5 is used when firmware upgrades are being done to the module. For normal operation it should be installed in the *RUN* position. See the *Upgrading Firmware* chapter of this manual for more information.

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

6. *VISTA*LINK® REMOTE MONITORING/CONTROL

6.1. WHAT IS *VISTA*LINK®?

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 *Vista*LINK® Pro Manager graphical user interface (GUI), third party or custom manager software may be used to monitor and control Evertz *Vista*LINK® enabled fiber optic products.

2. Managed devices (such as 7707CVT-4 and 7707CVR-4 cards), each with a unique address (OID), communicate with the NMS through an SNMP Agent. Evertz VistaLINK® enabled 7700 series modules reside in the 3RU 7700FR-C MultiFrame and communicate with the manager via the 7700FC VistaLINK® frame controller module, which serves as the Agent.

3. A virtual database known as the Management Information Base (MIB) lists all the variables being monitored and 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 *Vista*LINK® network, see the 7700FC Frame Controller chapter.

6.2. *VISTA*LINK® MONITORED PARAMETERS

The following parameters can be remotely monitored through the *Vista*LINK® interface.

Parameter	Description
Video 1 to 4 Standard	A range of values describing the detected video signal
Video 1 to 4 Signal Valid	Indicates the valid video signal
Optical Power	A range of values describing optical power at the fiber input
Module OK	Indicates the presence of a valid optical link with a 7707VAT module
Card Type	Indicates either 7707CVR-4, 7707CVR-4-H, 7707CVR-4-A16 or 7707CVR-4-A16-H card type.
Audio Signal Presence (7707CVR-4-A16 Only)	Indicates the presence of audio signal on channels 1 through 16

Table 6–1: *Vista*LINK® Monitored Parameters

6.3. *VISTA*LINK® TRAPS

The following traps can be remotely monitored through the VistaLINK® interface.

Trap	Description
Audio Presence (7707CVR-4-A16 Only)	Indicates the presence of Audio 1 through 16
Module Not OK	Indicates that the module does not operate properly (status of Local Fault LED)
Video Input 1 to 4 Invalid	Indicates a valid video signal on Channel 1 to 4 NOTE: Always loss on blocked channel
Link Presence	Shows if the optical link is established
Link Errors	Indicates the presence of bit errors in the optical link
Optical Power Below Threshold	Indicates whether or not received optical power is below the set threshold

Table 6–2: *Vista*LINK® Traps

6.4. *VISTA*LINK® CONTROLLED PARAMETERS

When the MASTER jumper is set to the REMOTE position, the following parameters can be remotely controlled through the *Vista*LINK® interface. When the MASTER jumper is set to the LOCAL position the local jumper settings will override the settings configured through the *Vista*LINK® interface.

Parameter	Description
Video 1 to 4 DC Offset	A range of values describing DC Offset at the Video output (1 to 4)
Video 1 to 4 Gain	A range of values describing Gain of Video 1 to 4 output as a percentage (100 % = unity gain)
Video 1 to 4 EQ	A range of values describing the pre-emphasis being applied to the Video 1 to 4 output
Audio 1 to 16 Output Gain (7707CVR-4-A16 Only)	Sets the Audio Channel 1 to 16 Gain Level
Audio 1 to 16 Silence Level (7707CVR-4-A16 Only)	Sets the Audio Channel 1 to 16 Silence Detect Level
Audio 1 to 16 Silence Duration (7707CVR-4-A16 Only)	Sets the Audio Channel 1 to 16 Silence Detect Duration
Optical Power Alarm Threshold	Controls the power alarm threshold. VLPro Control Parameter Only.

Table 6–3: *Vista*LINK® Controlled Parameters

6.5. VISTALINK® GUI SCREENS

The following screen shots show the VistaLINK® GUI screens for the 7707CVR-4 and 7707CVR-4-A16.

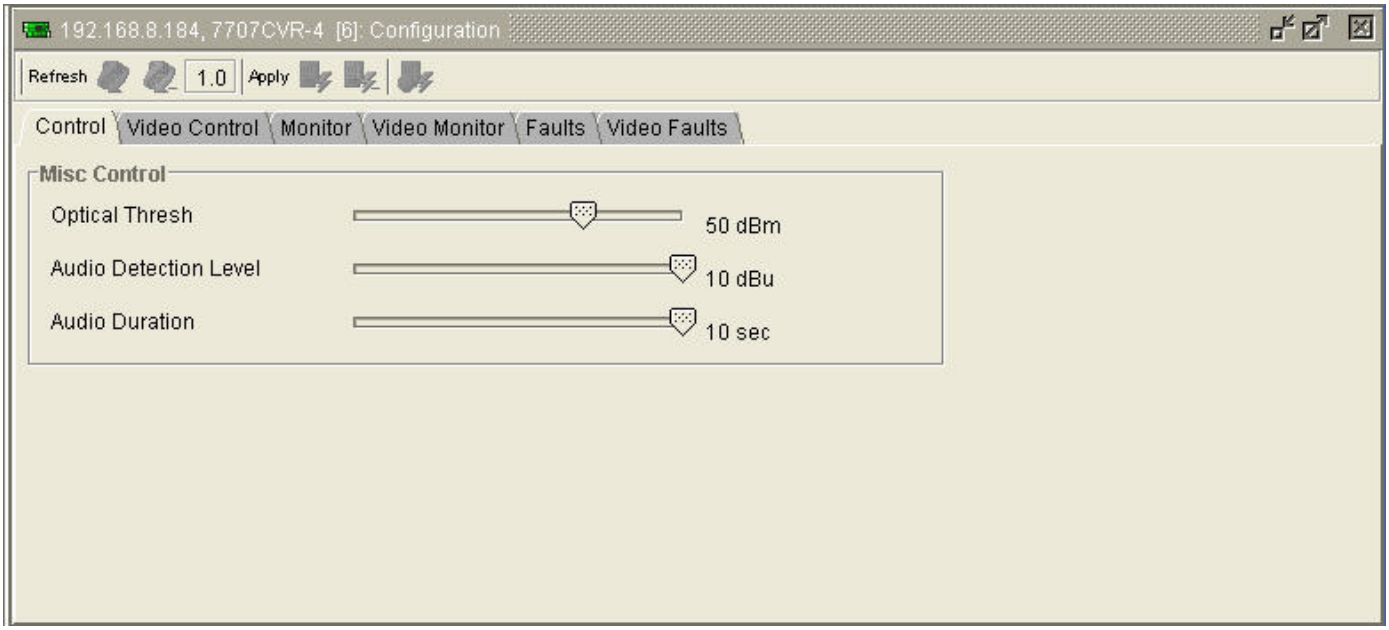

Figure 6-1: Control Tab

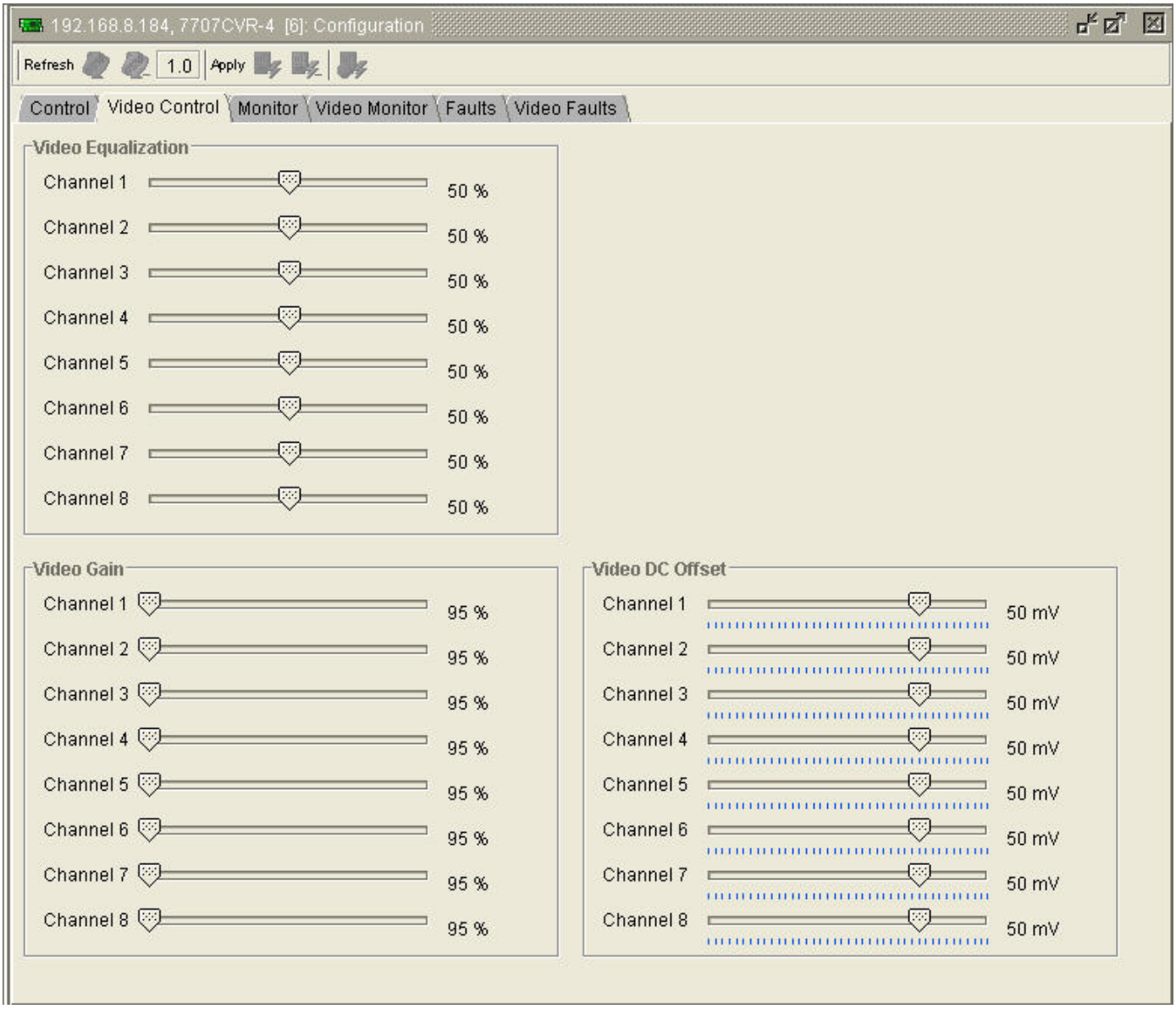

Figure 6-2: Video Control Tab

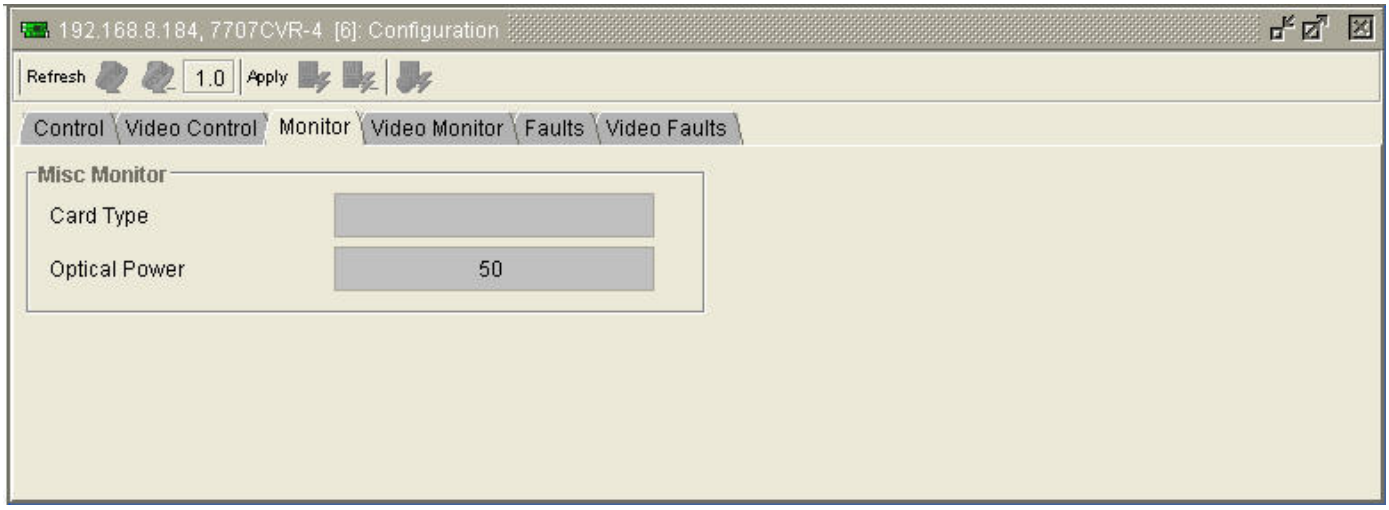

Figure 6-3: Monitor Tab

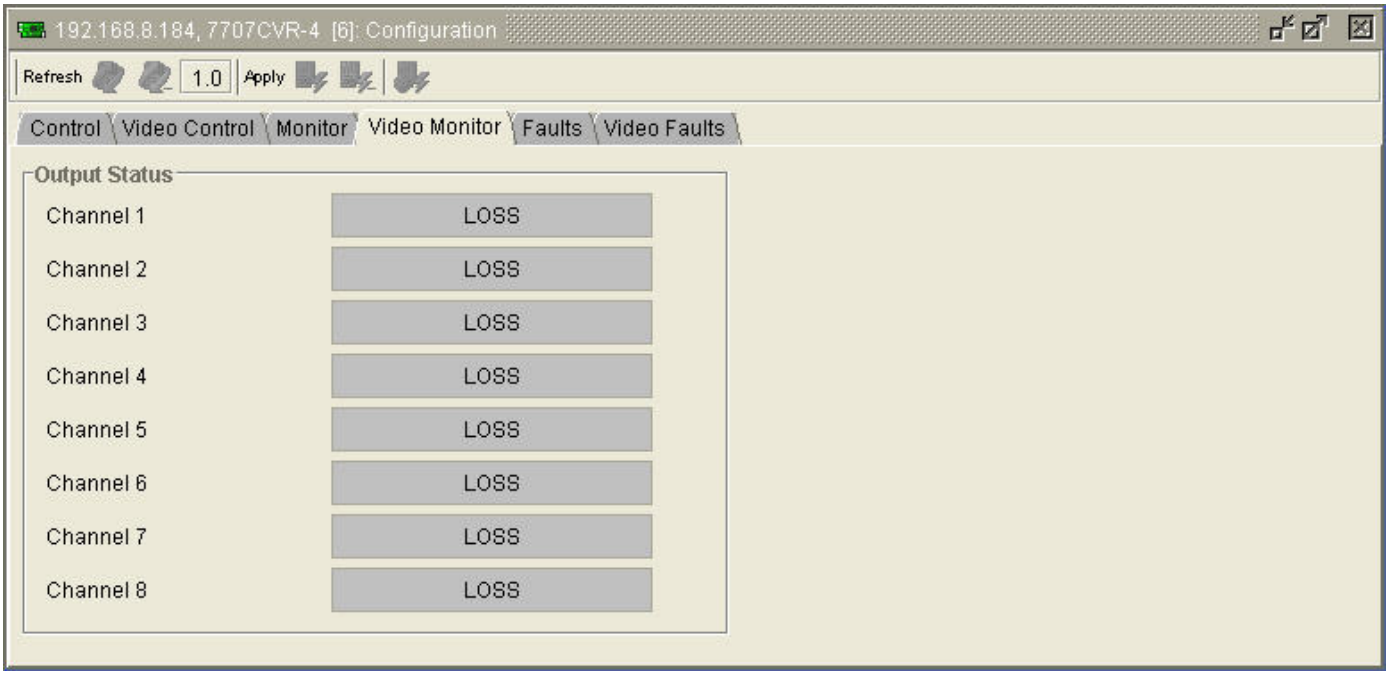

Figure 6-4: Video Monitor Tab

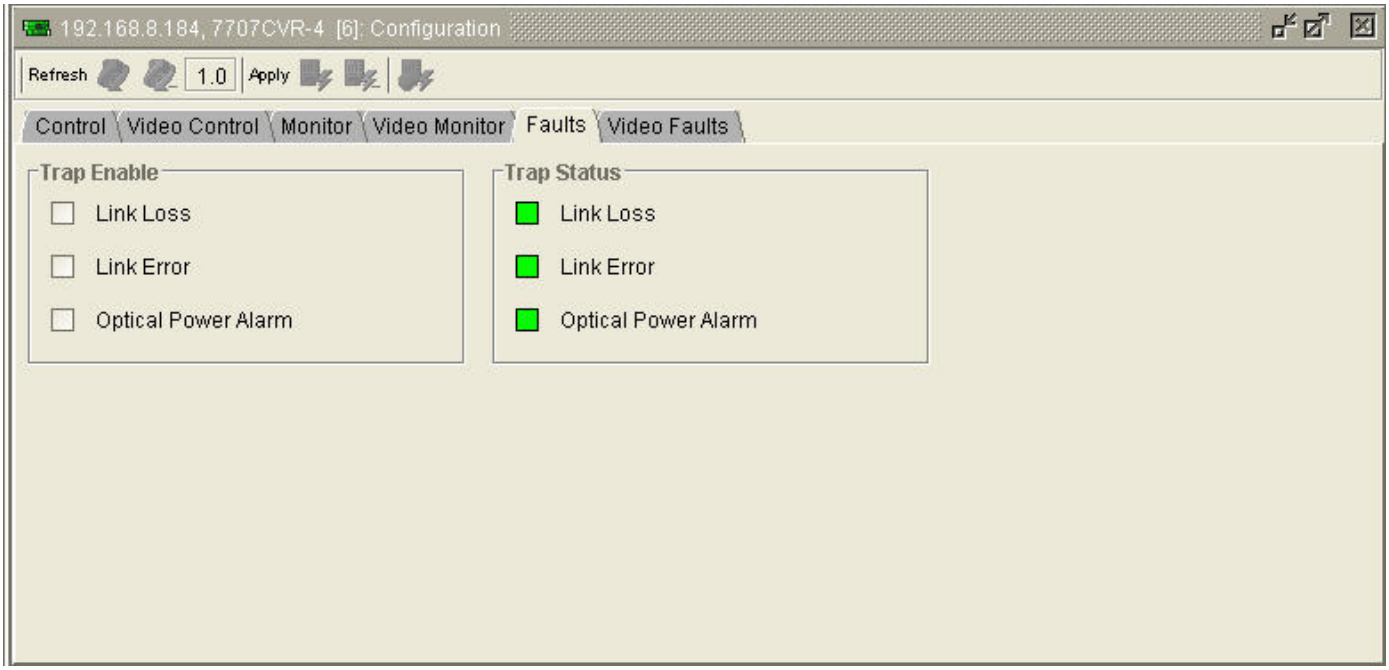

Figure 6-5: Faults Tab

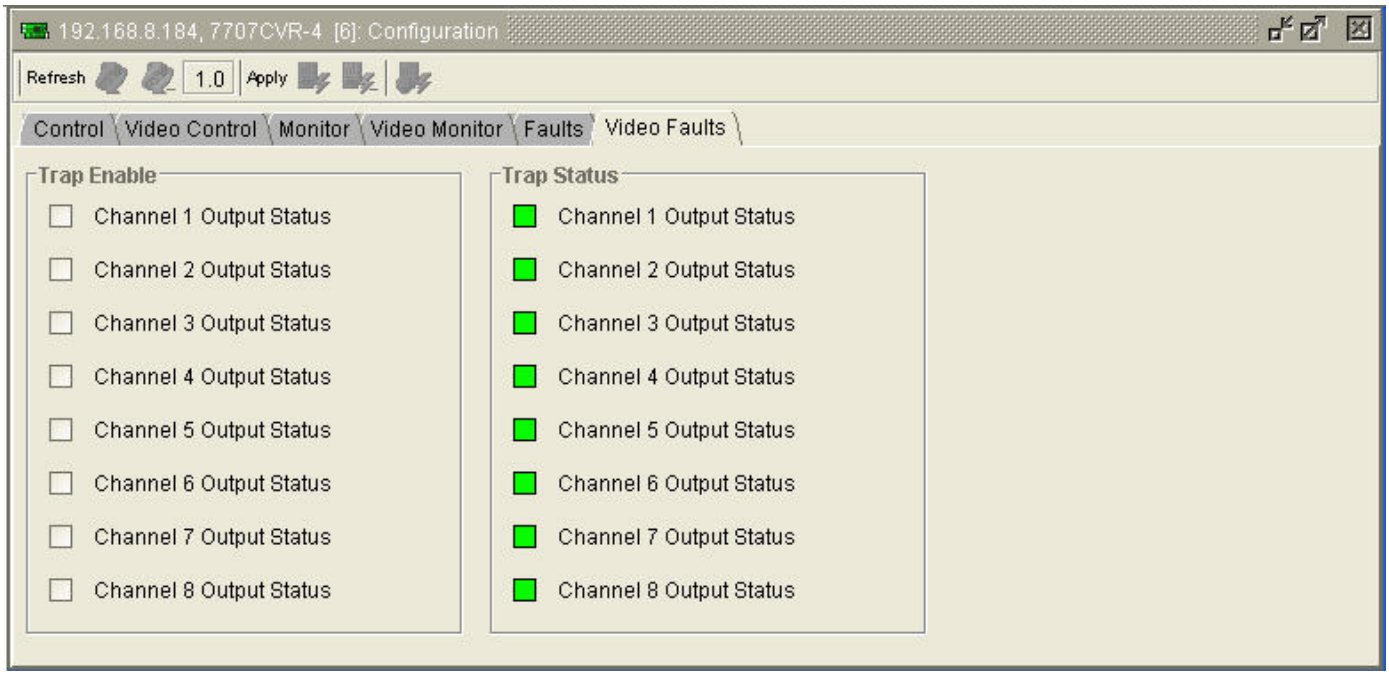

Figure 6-6: Video Faults Tab

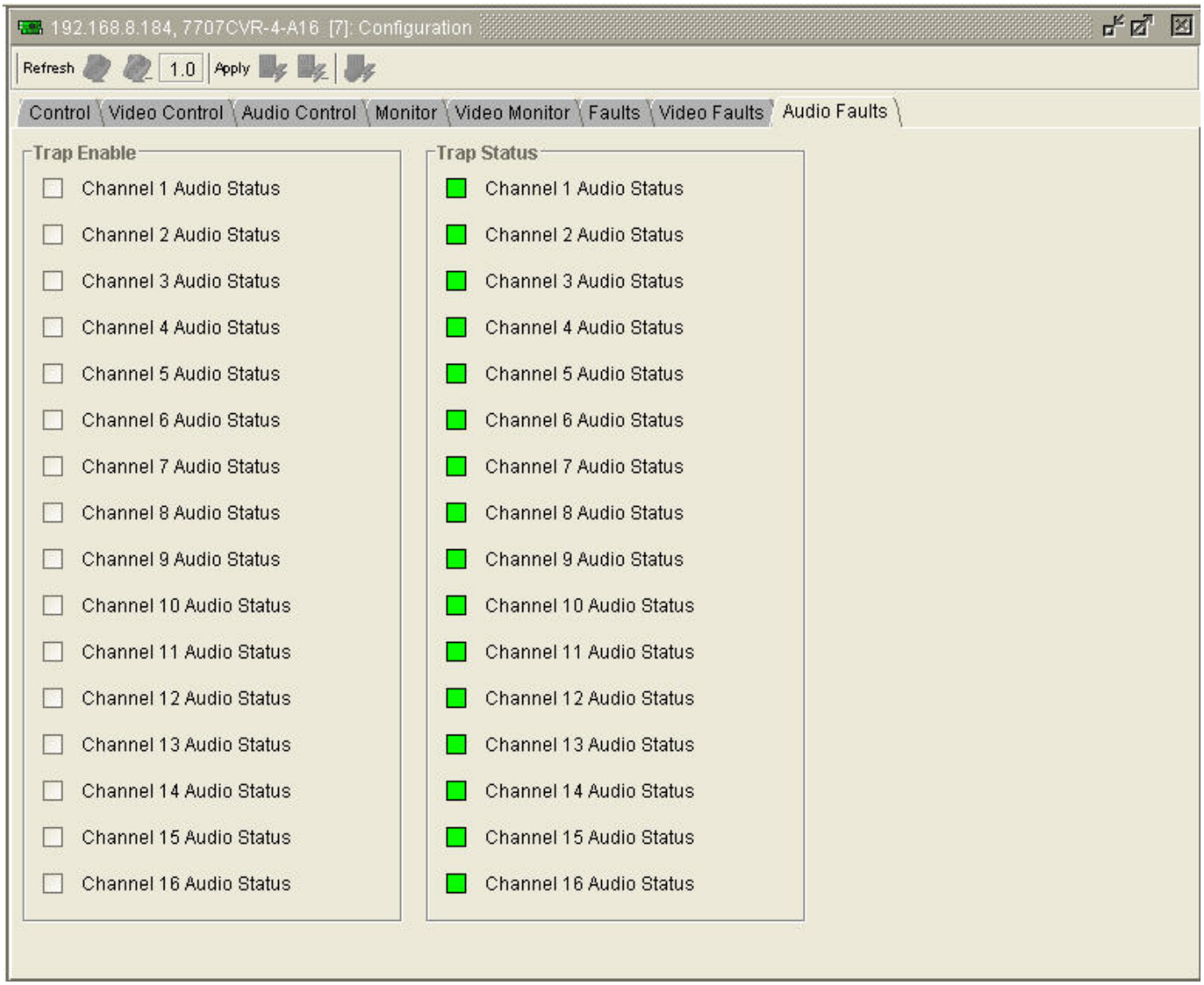

Figure 6-7: Audio Faults Tab (7707CVR-4-A16 only)