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REVISION HISTORY

REVISION	DESCRIPTION	DATE
1.0	Initial Release	May 06
1.1	Added Reference	Aug 08
1.2	Removed some featured items	Feb 09

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 7707CVTA series DWDM cards and any 7707CVRA series cards directly with a short fiber optic cable. The 7707CVTA series DWDM card produces +7dBm of power which will damage the receiver if connected directly.

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

1. OVERVIEW

The 7707CVTA is a VistaLINK® enabled, composite analog video and analog audio fiber transmitter for broadcast quality video and audio signals. This single card module accepts one NTSC or PAL analog video input with up to four analog audio inputs, performs analog to digital conversion and transmits them over a single fiber. The companion 7707CVRA Composite Video and Analog Audio fiber receiver demultiplexes the signals and converts them back to analog form.

The 7707CVTA-2 Dual Composite Video and Analog Audio fiber transmitter is a dual channel version that digitizes and multiplexes 2 analog video and up to four analog audio signals and converts them to an optical signal for transmission. The companion 7707CVRA-2 Dual Composite Video and Analog Audio fiber receiver accepts a fiber optic input, demultiplexes the signals, performs D to A conversion and outputs 2 NTSC or PAL analog video signals and up to four balanced analog audio signals.

The fiber output is available in an assortment of optical wavelengths, accommodating standard or CWDM transmission schemes. (7707CVTA shown, 7707CVTA-2 similar)

7707CVTA13	1310 nm FP	-7dBm output, suitable for distances up to 50 Km
7707CVTA13M	1310 nm FP	0dBm output, suitable for distances up to 75 Km
7707CVTA15	1550 nm DFB	0dBm output, suitable for distances up to 75 Km

There are several versions with built in isolators specifically suited to coarse wave division multiplexing (CWDM) applications. These versions all have 0dBm output and are suitable for distances up to 75 Km.

7707CVTA27	1270 nm DFB
7707CVTA29	1290 nm DFB
7707CVTA31	1310 nm DFB
7707CVTA33	1330 nm DFB
7707CVTA35	1350 nm DFB
7707CVTA37	1370 nm DFB
7707CVTA43	1430 nm DFB
7707CVTA45	1450 nm DFB
7707CVTA47	1470 nm DFB
7707CVTA49	1490 nm DFB
7707CVTA51	1510 nm DFB
7707CVTA53	1530 nm DFB
7707CVTA55	1550 nm DFB
7707CVTA57	1570 nm DFB
7707CVTA59	1590 nm DFB
7707CVTA61	1610 nm DFB

There are several versions with built in isolators specifically suited to dense wave division multiplexing (DWDM) applications. The DWDM versions are suitable for distances >120 km @ 270 Mb/s (for DWDM applications contact factory).

7707CVTADyyy	DWDM DFB laser output, yyy – ITU channel number

The 7707CVTA and 7707CVTA-2 occupy one card slot and 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 modules.

Features:

- Single card slot including fiber optic converter
- Supports both NTSC and PAL video
- Broadcast quality analog video and audio performance
- High video signal to noise ratio
- Superior digital data transmission methods
- Video loop-through for additional signal distribution or monitoring (7707CVTA only)
- Signal transport over fiber is uninterrupted by loss of input video or audio feeds
- Low Audio to Video latency
- Signal and status monitoring via four-digit card-edge display, or through SNMP and *Vista*LINK® enabled capability
- Adjustable gain equalization for up to approximately 300m of Belden 1694 coaxial cable
- 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
- Optical output wavelengths of 1310nm, 1550nm, up to sixteen CWDM wavelengths and up to 40 DWDM wavelengths

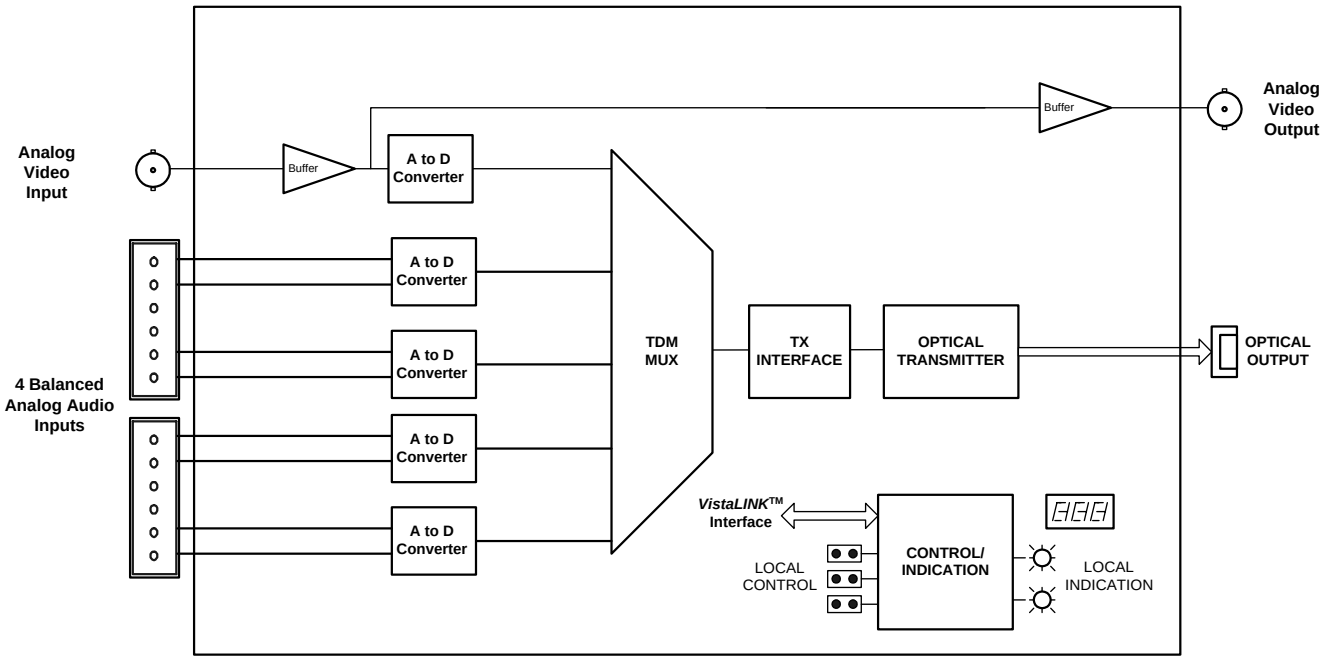

Figure 1-1: 7707CVTA Block Diagram

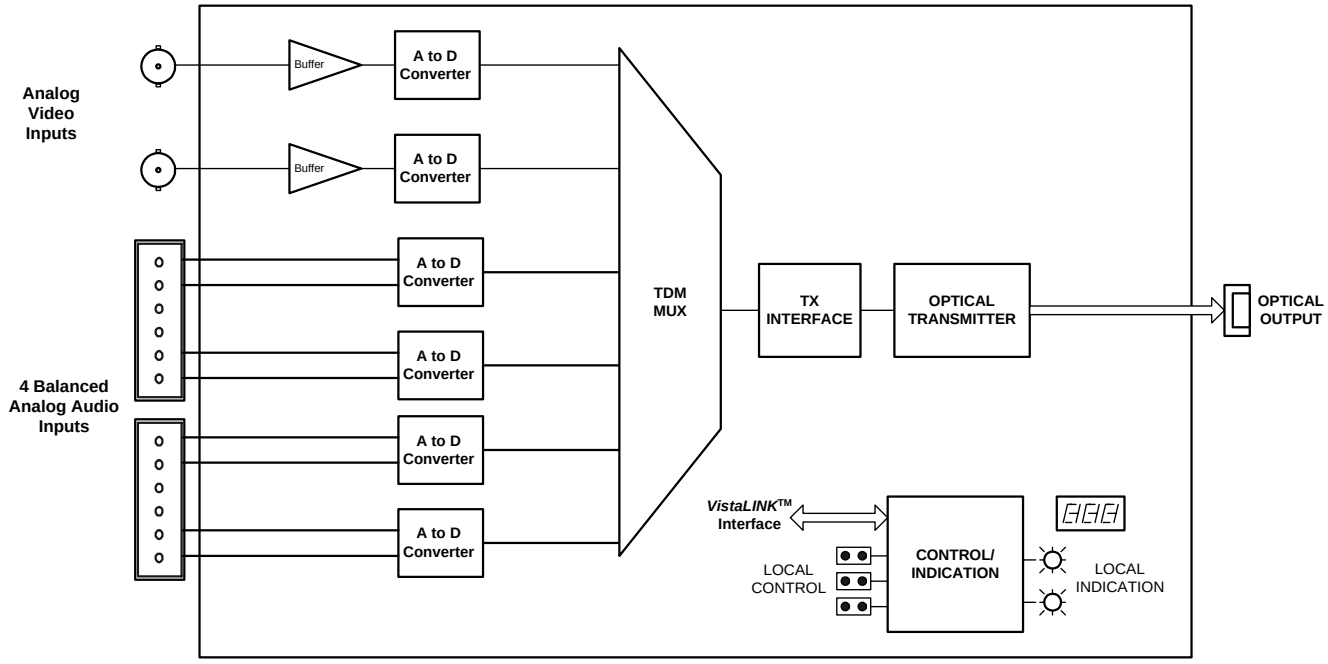

Figure 1-2: 7707CVTA-2 Block Diagram

2. INSTALLATION

The 7707CVTA comes with a companion rear plate that has two BNC connectors, one twelve pin terminal header with removable terminal block and one SC/PC, SC/PC with cover flap, ST/PC or FC/PC optical connector. For information on mounting the rear plate and inserting the module into the frame see section 3 of the 7700FR chapter.

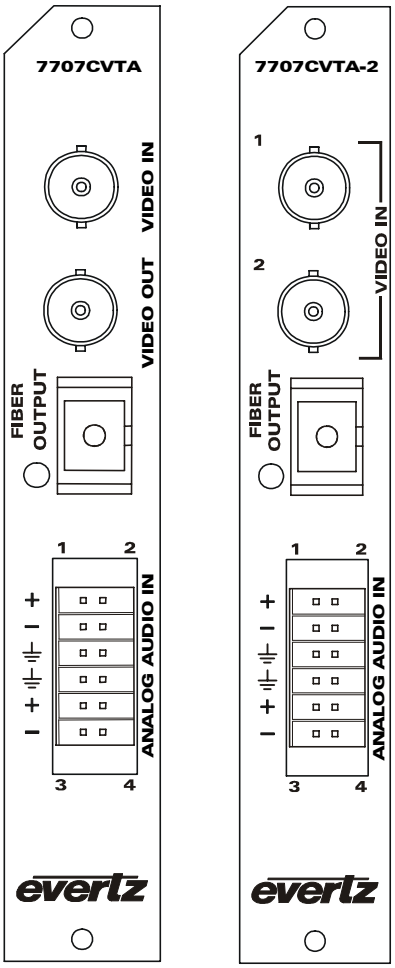

Figure 2-1: 7707CVTA Rear Panels

VIDEO IN: Input BNC accepts analog NTSC or PAL video signals. On the 7707CVTA-2 there are separate video inputs for each of the video signals. This input provides equalization compensation for up to approximately 250m of industry standard Belden 1694 coaxial cable.

VIDEO OUT: (7707CVTA only) Output BNC connector for additional signal distribution or signal monitoring.

OPTICAL OUTPUT: Output SC/PC, ST/PC or FC/PC female connector. This output contains the Time Domain Multiplex (TDM) of the digitized analog video signal and analog audio signal.

This optical output is available in 1310nm, 1550nm, up to sixteen CWDM wavelengths (ITU-T G.694.2 compliant) and up to 40 DWDM wavelengths (ITU-T G.694.1 compliant). The output wavelength is marked on the rear panel of each module. When connected directly to a companion module, the output is compatible with multi-mode fiber optic cable. If not connected directly (i.e. connected through CWDM, DWDM, WDM, or splitter/combiner) the output is compatible only with single-mode fiber optic cable.

Do not hook up the 7707CVTA series DWDM cards and any 7707CVRA series cards directly with a short fiber optic cable. The 7707CVTA series DWDM cards produce +7dBm of power which will damage the receiver if connected directly.

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

AUDIO IN: Balanced analog audio inputs for 4 channels. Each input (+, -, GND) is on three of twelve pins on a twelve pin terminal header.

2.1. CARE AND HANDLING OF OPTICAL FIBER

2.1.1. Safety

CLASS 1 LASER PRODUCT

Background colour: yellow
Triangular band: black
Symbol: black

2.1.2. Assembly

Assembly or repair of the laser sub-module is done only at Evertz facility and performed only by qualified Evertz technical personnel.

2.1.3. Labeling

Certification and Identification labels are combined into one label. As there is not enough room on the product to place the label it is reproduced here in the manuals.

- There is no date of manufacture on this label as it can be traced by bar code label placed on the Printed circuit board of each Evertz plug-in module
- The Model number is one of: 7707CVTA13, 7707CVTA13-2, 7707CVTA13M, 7707CVTA13M-2, 7707CVTA15, 7707CVTA15-2
  7707CVTAxx, 7707CVTAxx-2 (xx = 27, 29, 31, 33, 35, 37, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61)
  7707CVTADyyy, 7707CVTADyyy-2 (Dyyy represents ITU Grid Channel: D200, D210, D220, D230, D240, D250, D260, D270, D280, D290, D300, D310, D320, D330, D340, D350, D360, D370, D380, D390, D400, D410, D420, D430, D440, D450, D460, D470, D480, D490, D500, D510, D520, D530, D540, D550, D570, D580, D590, D600)

Figure 2-2: Reproduction of Laser Certification and Identification Label

2.1.4. Handling and Connecting Fibers

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 about care and handling of fiber optic cable see section 3 of the Fiber Optics System Design section of this manual binder.

3. SPECIFICATIONS

3.1. ANALOG VIDEO INPUT

Standards: NTSC, SMPTE 170M, PAL, ITU-R 624-4
Number of Inputs: 1 on 7707CVTA, 2 on 7707CVTA-2
Connector: BNC per IEC 61169-8 Annex A.
Signal Quantization: 12 bits on 7707CVTA, 10 bits on 7707CVTA-2
System Bandwidth: 5.5MHz
Input Level: 2 Vp-p (Maximum)
Gain Equalization: up to 250m of Belden 1694 or equivalent (adjustable)
Input impedance: 75 Ohms
Return Loss: > 30 dB to 5.5 MHz
Signal/Noise Ratio: > 72 dB
Differential Gain: < 1.0 %
Differential Phase: < 0.7 Degree
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%

3.2. ANALOG VIDEO OUTPUT (7707CVTA ONLY)

Standard: NTSC, SMPTE 170M, PAL, ITU-R 624-4
Number of Outputs: 1 buffered version of input
Connector: BNC per IEC 61169-8 Annex A.
Output Level: 1V p-p
Output Impedance: 75 Ohms
Return Loss: > 30 dB to 5.5 MHz

3.3. ANALOG AUDIO INPUTS

Number of Inputs: 4
Type: Balanced analog audio
Connector: 12 pin removal terminal block
Input impedance: High Impedance (>20 KOhm)
Freq. Response: +/-0.1 dB, 20Hz to 20 kHz
THD 20Hz–20Khz: < 0.005%
Channel Phase Diff.: +/- 1 deg
SNR (weighted): > 85 dB
Max. Audio Input Level: +24 dBu
Signal Quantization: 24 Bits

3.4. OPTICAL OUTPUT

Number of Outputs: 1
Connector: Female SC/PC, SC/PC with cover flap, ST/PC or FC/PC
Return Loss: > 14 dB
Rise and Fall Time: 200ps nominal
Fiber Size: 9 μm core / 125 μm overall
Wavelengths:
Standard: 1310nm, 1550nm (nominal)
CWDM: 1270nm to 1610nm (ITU-T G.694.2 compliant)
DWDM: ITU channel 20 to 60, 100GHz spacing, (ITU-T G.694.1 compliant)
Output Power:
1310nm FP (Standard) -7dBm ± 1dBm
1310nm FP (M Version) 0dBm ± 1dBm
1550nm & CWDM DFB 0dBm ± 1dBm
DWDM DFB +7dBm ± 1dB

3.5. SYSTEM PERFORMANCE

Video Input to Video Output Delay: < 10μs
Audio Input to Audio Output Delay: < 1.9ms

3.6. ELECTRICAL

Voltage: +12VDC
Power: 12Watts.

3.7. COMPLIANCE

Electrical Safety: CSA Listed to CSA C22.2 No. 60065-03, UL 60065-03
IEC 60065-(2001-12) 7th Edition
Complies with CE Low voltage directive 93/68/EEC
Laser Safety: Complies with 24 CFR 1040.10 and 1040.11 except for deviations pursuant to LN No. 50, dated July 26, 2001
Complies with IEC 60825-1, Am. 2
EMI/RFI: Complies with FCC regulations for class A devices.
Complies with EU EMC directive 89/336/EEC.

3.8. PHYSICAL

7700 or 7701 frame mounting:
Number of slots: 1

4. STATUS INDICATORS AND DISPLAYS

The 7707CVTA has 6 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 7-1 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 video and audio input signal, if a laser fault exists, 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 video or audio input signal is present, and the laser and board power are good.

There are four small LEDs on the back side of the board that indicate the presence of audio signals above the detection level (see section 5.4.1 for information about configuring the audio detection).

AUDIO 1 PRESENT: This Green LED indicates the presence of a valid signal on the Audio 1 input.

AUDIO 2 PRESENT: This Green LED indicates the presence of a valid signal on the Audio 2 input.

AUDIO 3 PRESENT: This Green LED indicates the presence of a valid signal on the Audio 3 input.

AUDIO 4 PRESENT: This Green LED indicates the presence of a valid signal on the Audio 4 input.

4.2. DOT-MATRIX DISPLAY

Additional signal and status monitoring and control over the card's parameters is provided via the 4-digit alphanumeric display located on the card edge. 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). To select one of the display modes, press the pushbutton one or more times to exit the current display mode and return to the mode select menu item (the display will show **MON** or **SET**). Press the toggle switch to select the monitor mode (**MON**) or control mode (**SET**). Once you have selected the desired mode press the pushbutton to enter that mode. For information about setting up the module in control mode see section 5.

When you are in monitor mode, the toggle switch determines what data is being displayed on the alphanumeric display. Each time the toggle switch is pressed up/down, the display advances to the next/previous display. A message indicating what display mode is active is shown for one second. After one second without the toggle switch being pressed, the selected display data is shown. The card edge pushbutton is used to select sub-items where applicable.

The following display messages indicate what is being displayed.

AJCK Set Headphone Jack Audio Channel
VSTD Video Standard in Use

The details of the each of the displays are described in the section 4.2.1 and 4.2.2.

4.2.1. Setting the Headphone Jack Channel

The **AJCK** display allows the user to set whether audio channels 1/2 or 3/4 will be monitored on the card edge headphone jack. After one second the display will show a message indicating the current audio channel being monitored at the headphone jack. When this message is showing, press the pushbutton to change the audio channel being monitored.

A1/2 Audio channels 1 and 2 will be monitored at the headphone jack.
A3/4 Audio channels 3 and 4 will be monitored at the headphone jack.

4.2.2. Displaying the Video Standard

The 7707CVTA detects the Video standard of the input signal and displays this on the four-digit card edge display. The following list describes possible displays and their function.

NTSC SMPTE 170M
PAL ITU-R624-4
LSV Indicates that no valid video signal is present on the input. This message overrides the normal video standard message.

5. CARD EDGE MENU SYSTEM

5.1. NAVIGATING THE MENU SYSTEM

When you are in control mode, the toggle switch and pushbutton are used to navigate through a menu system to set various parameters for the module. To enter the menu system, press the pushbutton one or more times to exit the current display mode and return to the mode select menu item. The display will show MON or SET. Press the toggle switch to select control mode (SET) and then press the pushbutton to enter the control mode main setup menu. You can use the toggle switch to move up and down the list of available submenus. Once the desired submenu name is displayed, press the pushbutton to select the next menu level.

Once you are in the submenu, there will be a list of parameters to adjust. To adjust any parameter, use the toggle switch to move up or down to the desired parameter and press the pushbutton. Using the toggle switch, adjust the parameter to its desired value. If the parameter is a numerical value, the number will increase if you lift the toggle switch and decrease if you push down on the toggle switch. If the parameter contains a list of choices, you can cycle through the list by pressing the toggle switch in either direction.

When you have stopped at the desired value, depress the pushbutton. This will update the parameter to the selected value and return to the mode select menu item (the display shows **SET**). To change another parameter, press the pushbutton to enter the main menu system again and continue selecting and adjusting other parameters.

Throughout the descriptions of the Menu items, default values are shown in <u>underlined</u> text.

Each time the toggle switch is pressed up/down, the display advances to the next/previous display. A message indicating what display mode is active is shown for one second. After one second without the toggle switch being pressed, the selected display data is shown. The card edge pushbutton is used to select sub-items where applicable.

5.2. TOP LEVEL MENU STRUCTURE

The following is a brief description of the top level of the menu tree that appears when you enter the Control menu. Selecting one of these items will take you down into the next menu level. The details of the each of the displays are described in the sections 5.3 to 5.5.

EQ1	Configures the input cable equalization on Video input 1.
EQ2	Configures the input cable equalization on Video input 2 (CVTA-2 only).
ADET	This submenu allows you to set parameters related to the Audio detection.
DISP	Allows you to set the orientation of the front panel display.
FRST	Resets the module to its factory reset values.

5.3. SETTING THE VIDEO CONTROLS

The first group of menu items are used to configure the control items related to the Video. The 7707CVTA has only 1 video channel while the 7707CVTA-2 has 2 video channels, therefore some of the menu items related to video channel 2 will not be described in the following. For the sake of simplicity, only the menu items for video channel 1 are shown.

5.3.1. Setting the Cable Equalization

EQ1
0 *0 to 300*

The *EQ* controls are used to set the amount of cable equalization being applied at the video input(s). It can be adjusted to compensate for various input 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 cable equalization is turned off.

5.4. SETTING THE AUDIO CONTROLS

The first group of menu items are used to configure the control items related to the Audio. The menu items for each channel are identical therefore for the sake of simplicity, only the menu items for A1 channel are shown.

5.4.1. Configuring Audio Presence Detection

The ADET submenu contains 3 menu items (for each audio channel) related to the Audio detection. The menu items for each channel are identical, therefore for the sake of simplicity, only the menu items for A1 channel are shown.

DET1
OFF *ON*

The *DET* controls enable audio presence detection on each of the channels.

The *LVL* and *DUR* controls are used to detect when the audio is considered missing. The *LVL* control sets the audio level under which the audio is considered missing. The audio must be under the *LVL* level for the duration set by the *DUR* control before the audio is considered missing. When audio is missing, the audio must be over the *LVL* level for 1 sec. before the audio will be considered present.

LVL1
–67 to 0 *-40*

The *LVL* control sets the audio level under which audio is considered to be missing. This value is expressed in dBu

DUR1
1 to 20 *10*

The *DUR* control sets the amount of time (in seconds) the audio is below the level set by the *LVL* control before the audio is considered missing.

5.4.1.1. Procedure to Calibrate Audio Presence Detection

1. Supply the 7707CVTA module that is being calibrated with your plant's noisiest audio feed without any audio program material present. This will be a baseline noise level to calibrate the audio-missing detector.
2. Set the *DUR* control to 0.5 sec so that you can see the results of adjusting the *LVL* parameter without getting confused with the detection time.
3. Adjust the audio *LVL* control upward from its minimum value until the corresponding *AUDIO PRESENT* LED on the card edge goes Off. This will be the noise floor level. Raise the *LVL* a few dB to make the detector insensitive to this noise level.
4. Set the *DUR* control to a time appropriate to your application. This should be set to a value longer than your worst case acceptable quiet period.

5.5. CHANGING THE ORIENTATION OF THE TEXT ON THE DISPLAY

DISP
VERT
HOR

The *DISP* control allows the user to select a horizontal or vertical orientation for the displays to accommodate mounting the module in the 3RU or 1RU frames.

5.6. RESTORING THE FACTORY SETTINGS

FRST
NO
YES

The *FRST* control allows the user to restore the factory values (those underlined) for the module's parameters described in sections 5.3 and 5.5.

6. CARD EDGE CONTROLS

The 7707CVTA is equipped with a three position, return to center toggle switch which is used to select the various card-edge displays and menu items. It is also used in conjunction with a momentary pushbutton to select some sub-items of the menu system. See sections 4.2 and 5 for information about the card edge displays and menu system.

6.1. MONITORING THE AUDIO

A stereo headphone jack located at the front of the module is used to monitor the individual audio channel pairs. The *AJCK* menu item is used to select the audio channels currently being monitored. (See section 4.2.1) The monitoring volume level can be adjusted by turning the level potentiometer located beside the headphone jack.

7. JUMPERS

Several jumpers, located at the front of the module are used to preset various operating modes. Figure 7-1 shows the location of the card edge controls, status indicators and jumpers.

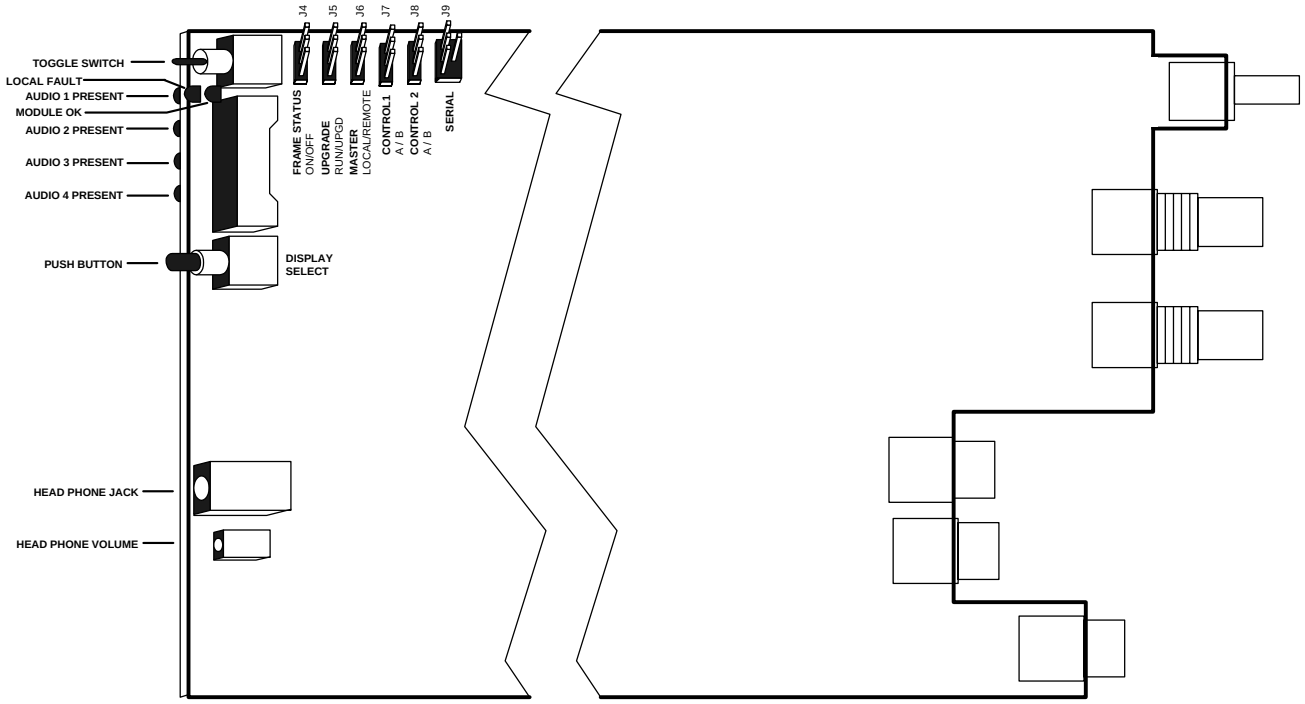

Figure 7-1: Location of Jumpers and Card Edge Controls

7.1. 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.

7.2. SELECTING WHETHER MODULE WILL BE CONTROLLED FROM THE LOCAL CONTROLS OR THROUGH THE *VISTA*LINK® INTERFACE

The MASTER jumper J6 selects whether the module will be controlled from the local user controls or through the *Vista*LINK® interface.

MASTER: When this jumper is installed in the LOCAL position, the card functions are controlled through the local jumpers.

When this jumper is installed in the REMOTE position, the card functions are controlled through the *Vista*LINK® interface.

7.3. 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.

8. *VISTA*LINK® REMOTE MONITORING/CONTROL

8.1. WHAT IS *VISTA*LINK®?

*Vista*LINK® is Evertz' 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. *Vista*LINK® 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 *Vista*LINK® 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, *Vista*LINK® enables the user to configure devices in the network from a central station and receive feedback that the configuration has been carried out.

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 7707CVTA and 7707CVRA 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, 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.

8.2. *VISTA*LINK® MONITORED PARAMETERS

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

Parameter	Description
Laser OK	Indicates whether the laser is operating without functional problems.
Master Jumper	Indicates if the card is in Local or Remote mode (the position of Master Jumper).
Module OK	Indicates whether the module is operating without functional problems.
Video A, B Standard	A range of values describing the detected video standard (channel B is available only on 7707CVTA-2).
Video A, B Signal Valid Present	Indicates the presence of a valid video input signal (channel B is available only on 7707CVTA-2).
Audio 1 Present	Indicates the presence of an Audio 1 input signal (the state of the AUDIO 1 PRESENT LED).
Audio 2 Present	Indicates the presence of an Audio 2 input signal (the state of the AUDIO 2 PRESENT LED)
Audio 3 Present	Indicates the presence of an Audio 3 input signal (the state of the AUDIO 3 PRESENT LED).
Audio 4 Present	Indicates the presence of an Audio 4 input signal (the state of the AUDIO 4 PRESENT LED).
Card Type	Indicates whether the card is 7707CVTA or 7707CVTA-2.

Table 8-1: *Vista*LINK® Monitored Parameters

8.3. *VISTA*LINK® CONTROLLED PARAMETERS

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

Parameter	Description
Video A PreEQ	A range of values describing equalization being applied at the Video A input.
Video B PreEQ	A range of values describing equalization being applied at the Video B input (7707CVTA-2 only).
Audio 1 Silence Level	Sets the Audio 1 Silence Detect Level
Audio 1 Silence Duration	Sets the Audio 1 Silence Detect Duration
Audio 1 Silence Detect Enable	Sets the Audio 1 Silence Detect Mode
Audio 2 Silence Level	Sets the Audio 2 Silence Detect Level
Audio 2 Silence Duration	Sets the Audio 2 Silence Detect Duration
Audio 2 Silence Detect Enable	Sets the Audio 2 Silence Detect Mode
Audio 3 Silence Level	Sets the Audio 3 Silence Detect Level
Audio 3 Silence Duration	Sets the Audio 3 Silence Detect Duration
Audio 3 Silence Detect Enable	Sets the Audio 3 Silence Detect Mode
Audio 4 Silence Level	Sets the Audio 4 Silence Detect Level
Audio 4 Silence Duration	Sets the Audio 4 Silence Detect Duration
Audio 4 Silence Detect Enable	Sets the Audio 4 Silence Detect Mode

Table 8-2: *Vista*LINK® Controlled Parameters

8.4. *VISTA*LINK® TRAPS

The following parameters can be remotely monitored through the *Vista*LINK® interface as trap statuses in the Configuration View and traps in the Alarm View.

Parameter	Description
Audio 1 Silence	Triggers on loss of an Audio 1 input signal. Loss of valid audio signal will trigger the "Audio Ch1 Level Too Quiet" trap in the VistaLINK Alarm View.
Audio 2 Silence	Triggers on loss of an Audio 2 input signal. . Loss of valid audio signal will trigger the "Audio Ch2 Level Too Quiet" trap in the VistaLINK Alarm View.
Audio 3 Silence	Triggers on loss of an Audio 3 input signal. . Loss of valid audio signal will trigger the "Audio Ch3 Level Too Quiet" trap in the VistaLINK Alarm View.
Audio 4 Silence	Triggers on loss of an Audio 4 input signal. . Loss of valid audio signal will trigger the "Audio Ch4 Level Too Quiet" trap in the VistaLINK Alarm View.
Laser OK	Indicates whether the laser is in good operating condition or not. If there is a laser fault it will trigger the "Laser Not OK" trap in the VistaLINK Alarm View.
Module OK	Indicates whether the card is in good operating condition or not. If there is a module fault it will trigger the "Module Not OK" trap in the VistaLINK Alarm View.
Signal A Invalid	Indicates if there is a valid input video signal present on channel A. Loss of valid video signal will trigger the "Signal Unknown" trap in the VistaLINK Alarm View.
Signal B Invalid	Indicates if there is a valid input video signal present on channel B. Loss of valid video signal will trigger the "Signal Unknown" trap in the VistaLINK Alarm View.
Not In Local Control Mode (trap only)	This trap in VistaLINK Alarm View triggers every time the card is switched to Remote mode.
In Local Control Mode (trap only)	This trap in VistaLINK Alarm View triggers every time the card is switched to Local mode.
Not In Remote Control Mode (trap only)	This trap in VistaLINK Alarm View triggers every time the card is switched to Local mode.
In Remote Control Mode (trap only)	This trap in VistaLINK Alarm View triggers every time the card is switched to Remote mode.

Table: 8-3: *Vista*LINK® Fault Status Parameters – Traps

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