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REVISION HISTORY

<u>REVISION</u>	<u>DESCRIPTION</u>	<u>DATE</u>
1.0	First Release Version	Mar 03
1.1	Updated rear panel drawing, Added Vistalink Section	Mar 04

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1. OVERVIEW

The 7720AE4-HD Audio Embedder inserts AES audio signals into a 270 Mb/s SDI video signal as specified in SMPTE 299M. The companion 7720AD4 Audio Deembedder facilitates audio demultiplexing at the destination.

SMPTE 299M allocates four groups of four audio channels that can be embedded into the SMPTE 292M bitstream. The 7720AE4-HD embeds up to 4 AES audio into two selectable groups on the SDI outputs for discrete 5.1 audio applications. The 7720AE4-HD is Dolby E compliant when the sample rate converters are turned off.

VistaLINK™ enables control and configuration capabilities via Simple Network Management Protocol (SNMP). This offers the flexibility to manage the module status monitoring and configuration from SNMP enabled control systems such as Evertz VistaLINK™ Pro locally or remotely.

Features:

- Automatic detection of video input format
- Bypass relay protection on one HD SDI output for power failures
- 24-bit AES input and audio embedding
- Individual audio group assignment for each group
- Group lock mode maintains phase relationship between the groups for 5.1 audio applications
- Sample rate conversion disable on AES inputs to permit Dolby E embedding
- Programmable audio delays (up to 7 frames in ½ video field resolution) using DIP switches.
- Ancillary packet cleaning mode removes all audio before embedding
- Ancillary packet reformatting mode left justifies and removes unused packets before embedding
- Embeds audio on internally generated black or blue video when there is no video input
- VistaLINK™ control capabilities for module configuration. VistaLINK™ capabilities are available when modules are used with the 3RU 7700FR-c frame and a 7700FC VistaLINK™ Frame Controller module in slot 1 of the frame. (feature not implemented at this time)
- Front panel LEDs indicate video and audio signal presence, and module fault.

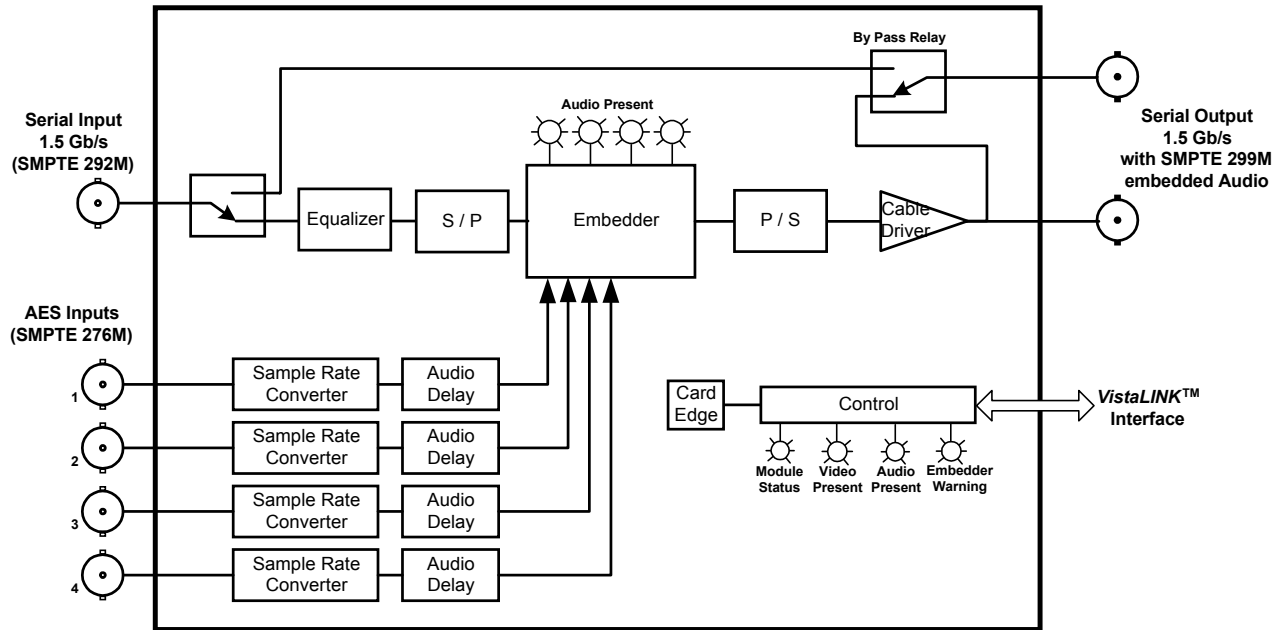


Figure 1: 7720AE4-HD Block Diagram

2. INSTALLATION

The 7720AE4-HD modules each come with a companion rear plate that has 7 BNC connectors. For information on mounting the rear plate and inserting the module into the frame see section 3 of the 7700FR chapter.

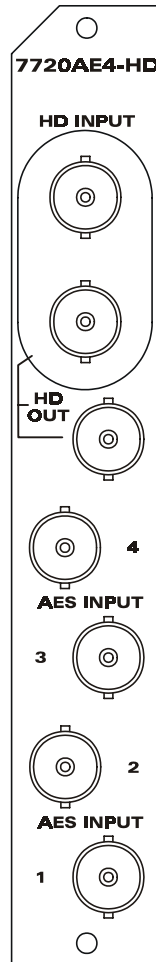


Figure 2: 7720AE4-HD Rear Panels

SDI INPUT Input BNC connector for 10-bit serial digital video signals compatible with the SMPTE 292M standard.

SDI OUTPUT There are two BNC connectors with reclocked serial component video outputs, compatible with the SMPTE 292M standard. These outputs contain the input video with the audio present at AES inputs 1 to 4 embedded in accordance with the SMPTE 299M standard. On the 7720AE4-HD the top SDI output is protected by a bypass relay, which will activate in the event of power loss to the module. The remaining output is not bypass protected.

AES INPUT 1 AES audio input for channel 1 and 2 of the audio group selected for embedding by embedder 1.

AES INPUT 2 AES audio input for channel 3 and 4 of the audio group selected for embedding by embedder 1.

AES INPUT 3 AES audio input for channel 1 and 2 of the audio group selected for embedding by embedder 2.

AES INPUT 4 AES audio input for channel 3 and 4 of the audio group selected for embedding by embedder 2.

3. SPECIFICATIONS

3.1. SERIAL VIDEO INPUT

Standard: SMPTE 292M (1.5Gb/s),
1080i/60, 1080i/59.94, 1080i/50, 1080p/30sF, 1080p/29.97sF, 1080p/25sF,
1080p/24sF, 1080p/23.98sF, 720p/60, 720p/59.94)
Connector: BNC per IEC 60169-8 Amendment 2.
Equalization: Automatic 100m @ 1.5 Gb/s with Belden 1694A or equivalent cable
Return Loss: > 15 dB up to 1.5 Gb/s

3.2. SERIAL VIDEO OUTPUTS WITH EMBEDDED AUDIO

Standard: same as input
Number of Outputs: 2 (1 output bypass relay protected)
Embedded Audio: SMPTE 299M – 24 bit 48 kHz synchronous
Connectors: BNC per IEC 60169-8 Amendment 2.
Signal Level: 800mV nominal
DC Offset: 0V \pm 0.5V
Rise and Fall Time: 200ps nominal
Overshoot: <10% of amplitude
Return Loss: > 15 dB up to 1.5 Gb/s
Wide Band Jitter: < 0.2 UI

3.3. AES AUDIO INPUTS

Number of Inputs: 4
Standard: SMPTE 276M, single ended AES
Connector: BNC per IEC 60169-8 Amendment 2.
Resolution: 24 bits
Sampling Rate: 32 to 96 kHz synchronous or asynchronous
(48 kHz synchronous AES required when sample rate converter is disabled.)
Impedance: 75 Ohms unbalanced
Signal Level: 1V p-p \pm 0.1V

3.4. SYSTEM PERFORMANCE

Embedding Latency: 1.3 to 3.0 msec

Audio Delay:

DIP Switch Control: up to 7 frames, ½ frame increments (delay applied to all AES channels)

VistaLINK™ or Serial Port Control: up to 1.35 seconds in 1 sample increments (independent control of delay for each channel)

3.5. ELECTRICAL

Voltage: + 12VDC
Power: 11 Watts.
EMI/RFI: Complies with FCC Part 15, class A and EU EMC directive.

3.6. PHYSICAL

7700 or 7701 frame mounting:

Number of slots: 1

Stand Alone Enclosure:

Dimensions: 14 " L x 4.5 " W x 1.9 " H
(355 mm L x 114 mm W x 48 mm H)
Weight: approx. 1.5 lbs. (0.7 Kg)

4. STATUS LEDS

The location of the status LEDs is shown in Figure 3.

4.1. MODULE STATUS LEDS

MODULE OK	This Green LED will be On when the module is operating properly. Depending on the Status LED mode chosen, the LED will be on solid when input video, or audio or both video and audio is present (see section 5.6)
LOCAL FAULT	<p>This Red LED makes it easy to identify one module in a frame that is missing an essential input or has another fault.</p> <p>The LED will blink on and off if the microprocessor is not running.</p> <p>Depending on the Status LED mode chosen, the LED will be on solid when input video, or audio is missing from all AES inputs, or both video and audio are missing. In addition this Led will be on when there is a fault in the module power supply.</p>
VIDEO PRESENT	This Green LED will be On when there is a valid video signal present at the module input.
AUDIO PRESENT	This Green LED will be On solid when there is a valid AES audio signal present at any of the AES inputs. In <i>Locked Group</i> mode, the LED will be on when there is at least one input on the AES 1 or AES2 and AES 3 or AES 4 inputs.
ERROR:	This Yellow LED will be On when there are errors in the embedding process (E.g. FIFO underflow)

4.2. AUDIO GROUP AND MODE STATUS LEDS

Four LEDs located on the lower end of the module (opposite the DIP switch) indicate the status of the audio groups when the DIP switches are all set to the OFF condition. LED 1 is located closest to the center of the module. When the DIP switches are set to other values, these LEDS are used to indicate various operational modes of the module. (See Table 1).

DIP Switch								Control Description	Value Description	LED				
1	2	3	4	5	6	7	8			1	2	3	4	
Off	Off	Off	Off	Off	Off	Off	---	Audio Present	AES1 Present	On				
									AES2 Present		On			
									AES3 Present			On		
									AES4 Present				On	
On	Off	Off	Off	Off	Off	Off	---	Audio Delay	Minimum	Off	Off	Off	Off	
									½ frame	On	Off	Off	Off	
									1 frame	Off	On	Off	Off	
									1 ½ frames	On	On	Off	Off	
									2 frames	Off	Off	On	Off	
									2 ½ frames	On	Off	On	Off	
									3 frames	Off	On	On	Off	
									3 ½ frames	On	On	On	Off	
									4 frames	Off	Off	Off	On	
									4 ½ frames	On	Off	Off	On	
									5 frame	Off	On	Off	On	
									5 ½ frames	On	On	Off	On	
									6 frames	Off	Off	On	On	
									6 ½ frames	On	Off	On	On	
									7 frames	Off	On	On	On	
									VistaLINK™ / Remote control	On	On	On	On	
Off	On	Off	Off	Off	Off	Off	---	Embedder 1	Disable	Off	Off	Off	Off	
							Enable		On	On	On	On		
On	On	Off	Off	Off	Off	Off	---	Embedder 1 Group	Group 1	On	Off	Off	Off	
							Group 2		Off	On	Off	Off		
							Group 3		Off	Off	On	Off		
							Group 4		Off	Off	Off	On		
Off	Off	On	Off	Off	Off	Off	---	Embedder 2	Disable	Off	Off	Off	Off	
							Enable		On	On	On	On		
On	Off	On	Off	Off	Off	Off	---	Embedder 2 Group	Group 1	Off	Off	Off	Off	
							Group 2		Off	On	Off	Off		
							Group 3		Off	Off	On	Off		
							Group 4		Off	Off	Off	On		
Off	On	On	Off	Off	Off	Off	---	HANC Handling	Clean & embed	Off	Off	Off	Off	
							Reformat and embed		On	On	On	On		
On	On	On	Off	Off	Off	Off	---	Lock Groups	Independent Groups	Off	Off	Off	Off	
									Locked Groups	On	On	On	On	
Off	Off	Off	On	Off	Off	Off	---	Sample Rate Converter	Disable	Off	Off	Off	Off	
									Enable	On	On	On	On	
On	Off	Off	On	Off	Off	Off	---	Status LED Mode	Video Only	On	Off	Off	Off	
									Audio Only	Off	On	Off	Off	
									Video/ Audio	On	On	Off	Off	
Off	On	Off	On	Off	Off	Off	---	Loss of Video Mode	Black	Off	Off	Off	Off	
									Blue	On	On	On	On	

Table 1: Audio Group and Mode Status LEDs

5. CARD EDGE CONTROLS

The 7720AE4-HD is equipped with an 8 position DIP switch to allow the user to select various functions. All positions are assigned sequentially such that the first position is located at the left side of the DIP switch (farthest from to the card ejector). When the switches are set to Off the LED status indicators near the DIP switch indicate the presence of the AES audio. When other DIP switch combinations are selected various operation modes of the module can be set using the toggle switch. The LED Mode indicators near the DIP switch indicate the settings of each of these modes as shown in Table 1. The On position is down, or closest to the printed circuit board. Sections 5.1 to 5.7 show the assigned DIP switch functions.

DIP Switch								Control Description
1	2	3	4	5	6	7	8	
Off	Off	Off	Off	Off	Off	Off	Off	Audio Present
On	Off	Off	Off	Off	Off	Off	Off	Audio Delay
Off	On	Off	Off	Off	Off	Off	Off	Embedder 1 Enable
On	On	Off	Off	Off	Off	Off	Off	Embedder 1 Group
Off	Off	On	Off	Off	Off	Off	Off	Embedder 2 Enable
On	Off	On	Off	Off	Off	Off	Off	Embedder 2 Group
Off	On	On	Off	Off	Off	Off	Off	HANC Handling Mode
On	On	On	Off	Off	Off	Off	Off	Lock Groups
Off	Off	Off	On	Off	Off	Off	Off	Sample Rate Converter Mode
On	Off	Off	On	Off	Off	Off	Off	Status LED Mode
Off	On	Off	On	Off	Off	Off	Off	Loss of Video Mode
---	---	---	---	---	---	---	On	VistaLINK™ or Remote Control

Table 2: Toggle Switch Function Overview

5.1. SELECTING THE AUDIO GROUPS THAT WILL BE EMBEDDED

The SMPTE 299M standard permits up to 4 groups of 4 audio channels to be embedded into the 270 Mb/s video bitstream. Model 7720AE4-HD has two separate embedders that will embed up to four audio channels (two AES pairs) into one of the groups. The Embedders can be treated as two independent embedders for unrelated audio content or can be locked together where the audio in both groups is related and hence its phase must be maintained (for example 5.1 surround sound audio).



Some legacy equipment may not be compatible with two embedded audio groups present in the video stream.

The source for Embedder A is the audio coming in on the AES IN 1 and 2 connectors. The source for Embedder B is the audio coming in on the AES IN 3 and 4 connectors. There separate DIP switch settings that are used to enable or disable each embedder and to set the audio groups where the embedders will put the audio on the SDI output.

When the DIP switches are as shown in Table 3, the toggle switch is used to enable or disable Embedder 1. Each time the toggle switch is pressed up or down the Embedder 1 Enable mode will change as indicated by the LEDs in Table 3.

When set to *Disable* embedder 1 will be disabled. When it is set to *Enable* the embedder destination can be set when the DIP switches are set as shown in Table 4. Channels 1 and 2 from AES input 1 will be embedded into channels 1 and 2 of the selected group. Channels 1 and 2 from AES input 2 will be

embedded into channels 3 and 4 of the selected group. If audio is not present on one or both of the AES inputs, the respective channels of the selected audio group will be mute.

DIP Switch								Control Description	Value Description	LED			
1	2	3	4	5	6	7	8			1	2	3	4
Off	On	Off	Off	Off	Off	Off	Off	Embedder 1	Disable	Off	Off	Off	Off
									Enable	On	On	On	On

Table 3: Embedder 1 Enable Switch Settings

DIP Switch								Control Description	Value Description	LED			
1	2	3	4	5	6	7	8			1	2	3	4
On	On	Off	Off	Off	Off	Off	Off	Embedder 1 Group	Group 1	On	Off	Off	Off
									Group 2	Off	On	Off	Off
									Group 3	Off	Off	On	Off
									Group 4	Off	Off	Off	On

Table 4: Embedder 1 Group Switch Settings

When the DIP switches are as shown in Table 5, the toggle switch is used to enable or disable Embedder 2. Each time the toggle switch is pressed up or down the Embedder 2 Enable mode will change as indicated by the LEDs in Table 5.

When set to *Disable* embedder 2 will be disabled. When it is set to *Enable* the embedder destination can be set when the DIP switches are set as shown in Table 6. Channels 1 and 2 from AES input 3 will be embedded into channels 1 and 2 of the selected group. Channels 1 and 2 from AES input 4 will be embedded into channels 3 and 4 of the selected group. If audio is not present on one or both of the AES inputs, the respective channels of the selected audio group will be mute.

DIP Switch								Control Description	Value Description	LED			
1	2	3	4	5	6	7	8			1	2	3	4
Off	Off	On	Off	Off	Off	Off	Off	Embedder 2	Disable	Off	Off	Off	Off
									Enable	On	On	On	On

Table 5: Embedder 2 Enable Switch Settings

DIP Switch								Control Description	Value Description	LED			
1	2	3	4	5	6	7	8			1	2	3	4
On	Off	On	Off	Off	Off	Off	Off	Embedder 2 Group	Group 1	On	Off	Off	Off
									Group 2	Off	On	Off	Off
									Group 3	Off	Off	On	Off
									Group 4	Off	Off	Off	On

Table 6: Embedder 2 Group Switch Settings

5.2. SELECTING THE AUDIO DELAY

When the DIP switches are as shown in Table 7, the toggle switch is used to select one of fifteen delays which can be added to the audio before it is embedded. This delay allows the user to resynchronize the audio back to the video to accommodate video processing delays. The delay is applied to all AES channels prior to embedding.

DIP Switch								Control Description	Value Description	LED			
1	2	3	4	5	6	7	8			1	2	3	4
On	Off	Off	Off	Off	Off	Off	Off	Audio Delay	Minimum	Off	Off	Off	Off
									1½ frame	On	Off	Off	Off
									1 frame	Off	On	Off	Off
									1 ½ frames	On	On	Off	Off
									2 frames	Off	Off	On	Off
									2 ½ frames	On	Off	On	Off
									3 frames	Off	On	On	Off
									3 ½ frames	On	On	On	Off
									4 frames	Off	Off	Off	On
									4 ½ frames	On	Off	Off	On
									5 frame	Off	On	Off	On
									5 ½ frames	On	On	Off	On
									6 frames	Off	Off	On	On
									6 ½ frames	On	Off	On	On
									7 frames	Off	On	On	On

Table 7: Audio Delay Switch Settings

5.3. SELECTING HOW EXISTING EMBEDDED AUDIO WILL BE HANDLED AND WHERE THE EMBEDDED AUDIO WILL BE PLACED

When the DIP switches are as shown in Table 8, the toggle switch is used to select how existing HANC packets will be handled by the embedder.

DIP Switch								Control Description	Value Description	LED			
1	2	3	4	5	6	7	8			1	2	3	4
Off	On	On	Off	Off	Off	Off	Off	HANC Handling	Clean & embed	Off	Off	Off	Off
									Reformat and embed	On	On	On	On

Table 8: HANC Handling Mode Switch Settings

When *Clean and embed* is selected, all incoming HANC packets and embedded audio data will be removed; and new audio data will be embedded after EAV. The remaining H blanking period is filled with default blanking value.

When *Reformat and embed* is selected, pre-existing embedded audio contents will be extracted. All packets with "Marked Packet for Deletion" or containing the same selected audio groups that are selected for embedding will be removed. The remaining packets are left justified and new audio will be embedded after these packets.

5.4. SELECTING AES LOCKED GROUP MODE

For audio that is synchronous to video there is exactly 8008 audio samples (48kHz sampling rate) in 5 frames of NTSC, 525 line video. Most audio embedders will spread these samples as evenly as possible throughout the 5 frames of video. Because the 8008 samples do not divide evenly into 5 frames of video, there is a sequence that only repeats every 5 frames. In all video standards it is possible for the phase of the audio being embedded by two separate embedders to be out of phase with respect to each other. In order to transport 8 channels of audio (4 AES pairs) through an embedded link with exactly the same delay on each channel, both the embedder and the de-embedder must lock the FIFOs of both groups of audio together. Failing to do so will cause a phase difference between the audio from the two groups.

When the DIP switches are as shown in Table 9, the toggle switch is used to select whether the embedders will be operated separately or locked together for embedding related audio (such as 5.1 surround sound).

DIP Switch								Control Description	Value Description	LED			
1	2	3	4	5	6	7	8			1	2	3	4
On	On	On	Off	Off	Off	Off	Off	Lock Groups	Independent Groups	Off	Off	Off	Off
									Locked Groups	On	On	On	On

Table 9: Lock Group Mode Switch Settings

When *Independent group* mode is selected, Embedder 1 and Embedder 2 are operated independently of each other as if two separate embedder devices were used. The FIFOs are not locked together and the output phases of the two groups of embedded audio do not have any specific relationship to each other.

When *Locked group* mode is selected, the Embedder FIFOs are locked together maintaining the phase relationship between all 4 AES channel pairs in the embedded audio.



To maintain a guaranteed audio phase relationship through a complete SDI link, the audio de-embedder MUST also provide the same locked FIFO management functionality.

5.5. SELECTING SAMPLE RATE CONVERSION FOR AES INPUTS

When the DIP switches are as shown in Table 10, the toggle switch is used to select whether the sample rate conversion for the AES inputs is enabled or not.

DIP Switch								Control Description	Value Description	LED			
1	2	3	4	5	6	7	8			1	2	3	4
Off	Off	Off	On	Off	Off	Off	Off	Sample Rate Converter	Disable	Off	Off	Off	Off
									Enable	On	On	On	On

Table 10: Sample Rate Conversion Switch Settings

When the Sample Rate converters are *Enabled* the AES inputs are sample rate converted at 48 kHz that is synchronous to the input video. AES inputs can be either synchronous or asynchronous to the video source.

When the Sample Rate converters are *Disabled* the content of AES inputs is preserved without any loss, and directly embedded into the input video. AES inputs must be synchronous to the video source. This setting is required when embedding Dolby E.

5.6. SELECTING FUNCTION OF THE MODULE OK STATUS LED

When the DIP switches are as shown in Table 11, the toggle switch is used to select the function of the Module OK LED status indicator. (See section 4.1)

DIP Switch								Control Description	Value Description	LED			
1	2	3	4	5	6	7	8			1	2	3	4
On	Off	Off	On	Off	Off	Off	Off	Status LED Mode	Video Only	On	Off	Off	Off
									Audio Only	Off	On	Off	Off
									Video/ Audio	On	On	Off	Off

Table 11: Module OK Status LED Switch Settings

In the *Video only* mode the Module OK status LED will be On when there is video present

In the *Audio only* mode the Module OK status LED will be On when there is audio present on at least on of the AES inputs

In the *Video and Audio* mode the Module OK status LED will be On when there is video present and there is audio present on at least on of the AES inputs

5.7. SELECTING OPERATION WHEN THERE IS NO VIDEO INPUT

When there is no input video, the 7720AE4-HD will generate its own video and embed the audio onto it. When the DIP switches are as shown in Table 12, the toggle switch is used to select whether the module will generate black or blue video.

DIP Switch								Control Description	Value Description	LED			
1	2	3	4	5	6	7	8			1	2	3	4
Off	On	Off	On	Off	Off	Off	Off	Loss of Video Mode	Black	Off	Off	Off	Off
									Blue	On	On	On	On

Table 12: Loss of Video Mode Switch Settings

6. JUMPERS

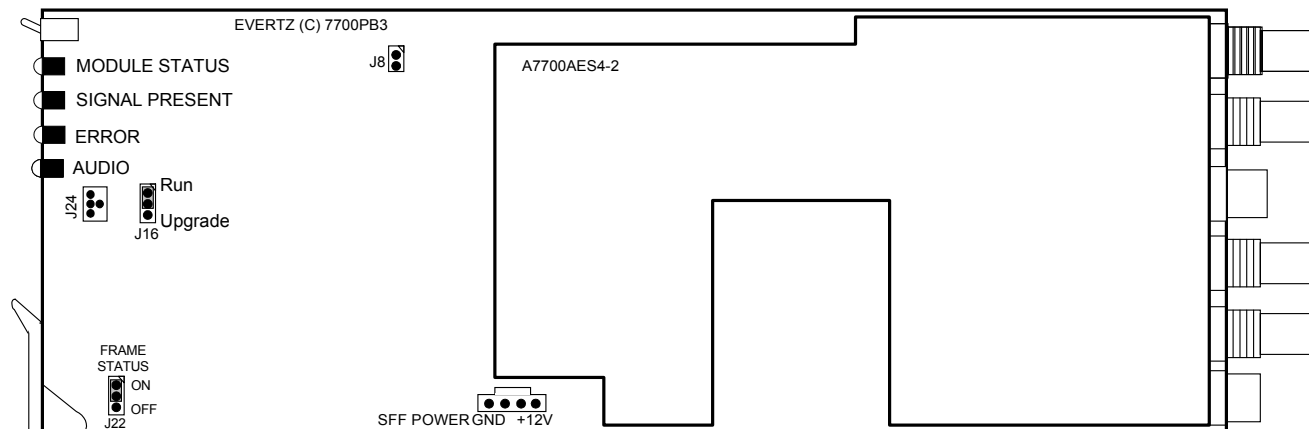


Figure 3: Location of Jumpers

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

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

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.

6.2. CONFIGURING THE MODULE FOR FIRMWARE UPGRADES

UPGRADE The UPGRADE jumper J16 located at the front of the module 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 in the front of the binder for more information.

To upgrade the firmware in the module unit pull it out of the frame. Move Jumper J16 into the *UPGRADE* position. Install the Upgrade cable provided (located in the vinyl pouch in the front of this manual) onto header J24 at the card edge. Re-install the module into the frame. Run the upgrade as described in *Upgrading Firmware* chapter in the front of the binder. Once the upgrade is completed, 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.

7. VistaLINK™ REMOTE MONITORING/CONTROL

7.1. WHAT IS VISTALINK™?

VistaLINK™ is Evertz's remote monitoring and control capability 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. For monitoring there needs to be a detecting device that automatically reports all errors to a central alarm and error logging station. We also need to be able to interrogate individual detector devices from the central station to determine the status of individual channels. Finally, we need to be able to configure devices in the network from the 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 VistaLINK™ Pro Manager graphical user interface (GUI), third party or custom manager software may be used to monitor and control Evertz VistaLINK™ enabled products.
2. Managed devices (such as 7721AE4-HD), 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 VistaLINK™ network, see the 7700FC Frame Controller chapter.

7.2. VISTALINK™ MONITORED PARAMETERS

The following parameters can be remotely monitored through the VistaLINK™ interface.

Parameter	Description
Input Signal Present	Indicates the presence of a valid video and audio input signal. (the state of the VIDEO and AUDIO present LEDs)
Local Mode	Indicates whether the Embedder module is under Vistalink or local control

Table 13: VistaLINK™ Monitored Parameters

7.3. VISTALINK™ CONTROLLED PARAMETERS

Parameter	Description
AES Delay	Sets the delay applied to the AES inputs before embedding
Audio Embedder 1 Enable	Enables/Disables embedder 1
Audio Embedder 1 Group	Sets destination group for embedder 1
Audio Embedder 2 Group	Enables/Disables embedder 2
Audio Embedder 2 Group	Sets destination group for embedder 2
HANC Mode	Sets whether the HANC space will be cleaned or reformatted
Group Lock Mode	Sets Group Lock mode
SRC Enable	Enables/Disables the Sample Rate Converters
LOV Mode	Controls if there will be black or blue video on Loss of Input

Table 14: VistaLINK™ Controlled Parameters

7.4. VISTALINK™ TRAPS

Trap	Description
Video Present Fault	Triggers when video is missing
AES 1 Present Fault	Triggers when AES 1 audio is missing
AES 2 Present Fault	Triggers when AES 2 audio is missing
AES 3 Present Fault	Triggers when AES 3 audio is missing
AES 4 Present Fault	Triggers when AES 4 audio is missing
Audio Embedder Fault	Triggers when there is a fault in the embedders

Table 15: VistaLINK™ Traps

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