# 7800EMR-ALINK2 User Manual



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# **IMPORTANT SAFETY INSTRUCTIONS**



- Read these instructions
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

#### WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC – SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE

#### WARNING

DO NOT EXPOSE THIS EQUIPMENT TO DRIPPING OR SPLASHING AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS ARE PLACED ON THE EQUIPMENT

#### WARNING

TO COMPLETELY DISCONNECT THIS EQUIPMENT FROM THE AC MAINS, DISCONNECT THE POWER SUPPLY CORD PLUG FROM THE AC RECEPTACLE

#### WARNING

THE MAINS PLUG OF THE POWER SUPPLY CORD SHALL REMAIN READILY OPERABLE

# **INFORMATION TO USERS IN EUROPE**

# <u>NOTE</u>

# **CISPR 22 CLASS A DIGITAL DEVICE OR PERIPHERAL**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to the European Union EMC directive. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.



EN60065 EN55103-1: 1996 EN55103-2: 1996 Safety Emission Immunity



EN504192 2005 Waste electrical products should not be disposed of with household waste. Contact your Local Authority for recycling advice

# **INFORMATION TO USERS IN THE U.S.A.**

# <u>NOTE</u>

# FCC CLASS A DIGITAL DEVICE OR PERIPHERAL

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

# WARNING

Changes or Modifications not expressly approved by Evertz Microsystems Ltd. could void the user's authority to operate the equipment.

Use of unshielded plugs or cables may cause radiation interference. Properly shielded interface cables with the shield connected to the chassis ground of the device must be used.



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# Tables



# **REVISION HISTORY**

#### REVISION

1.0

#### DESCRIPTION

DATE

First Release

Nov 2017

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Although every attempt has been made to accurately describe the features, installation and operation of this product in this reference guide, 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 reference guide 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.



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# 1. OVERVIEW

The 7800EMR-ALINK2 provides a means of a bulk audio interconnection from a Studer A-Link interface to TDM for Evertz EMR and EQX Audio products using TDM backbone. There are 2 paired TDM links (both TX and RX) for one A-Link bidirectional interface. This is the case for both independent paths that can be configured to function in a master-slave mode or a dual independent path mode. The A-Link interface, using a sample rate of 48kHz, will allow for this module to support up to 1280 mono channels per direction for each path. The 7800EMR-ALINK2 utilizes a video reference locked to the system reference to ensure the signals are properly locked for transporting the audio seamlessly back and forth across TDM and A-LINK. Reference is provided via the 7800 frame reference inputs, optionally the card does have an external reference that can be selected and used.



Figure 1-1: Block Diagram - 7800EMR-ALINK2

# **1.1. FEATURES & BENEFITS**

- Low latency TDMV2
- 1280 Mono Channels per path
- Main and Redundant paths with auto fail over or dual path
- References from Rear Panel or Frame Reference
- Single Network connection
- Hot-swappable, Front- loading Modular Card
- VISTALINK® Monitoring and SNMP Management System

# 1.2. AUDIO CONNECTION

- 4 TDM DIN Inputs: 4 DIN 1.0/2.3 Connectors
- 4 TDM DIN Outputs: 4 DIN 1.0/2.3 Connectors



#### **1.3. DUAL PORT MODE VS REDUNDANT MODE OPERATION**

The 7800EMR-ALINK2 operates in two distinct modes, Dual Port Mode and Redundant Mode. When operating in Dual Port Mode, TDM Input 1 serves as the Main TDM Input and TDM Input 2 serves as the backup input on both A-Link port 1 & 2.

In Redundant Mode, A-Link Port 1 serves as the main A-Link port and Input 1 as the main TDM Input. A-Link Port 2 serves as the backup A-Link Port and as the backup TDM Input. In this mode the 2<sup>nd</sup> TDM input on each A-Link port is not operational. All TDM outputs remain operational in either Dual Port Mode or Redundant Mode



Figure 1-2 : Redundant Mode vs. Dual Port Mode Rear Panel Configuration - 7800EMR-ALINK2



# 2. SPECIFICATIONS

2.1.	AUDIO INPUTS	
	Number of TDM Inputs	4 x DIN
	Number of TDM Outputs	4 x DIN
	Connector	BNC per IEC 61169-8 Annex A, DIN 1.0/2.3
	Impedance	75 $\Omega$ terminating
2.2.	A-LINK INPUTS/OUTPUTS	
	Number of A-LINK Inputs	2
	Number of A-LINK Outputs	2
	Connector:	SFP10G-TR85-A A-Link, SFP+ Optical Transceiver, 850nm, MMF
2.3.	CONTROL	
	Ethernet	1 x RJ45
2.4.	REFERENCE	
	External Reference Inputs	1 x DIN
	Frame Reference Inputs	2 x BNC (depends on the frame)
2.5.	FRAMES	
	Frame and Slot Occupancy	7800FR Frame with 1 slot occupancy
		7801FR Frame with 1 slot occupancy
		7800FR-QT Frame with 1 slot occupancy



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# 3. INSTALLATION

Before handling the card it is important to minimize the potential effects of static electricity. It is therefore recommended that an ESD strap to be worn.

7800EMR-ALINK2 module must have minimum 1 slot vacant in the frame. Each rear plate can house one 7800EMR-ALINK2 module.

#### 3.1. INSTALLATION OF 7800EMR-ALINK2 ON 7800FR FRAME

**Step 1:** Install the 7800EMR-ALINK2 rear plate to the 7800 frame with screws provided and make sure the orientation of the rear plate is as shown in Figure 3-1.



Figure 3-1 : 7800EMR-ALINK2 Rear Plate

**Step 2:** Insert the 7800EMR-ALINK2 module in the 7800FR Frame and make sure the orientation of the card is correct and it is pushed all the way into the frame.



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# 4. FRONT CARD EDGE CONTROLS AND LEDS

The 7800EMR-ALINK2 front card edges have some key controls and indicators that can help in the installation and debugging processes. Figure 4-1 shows the card edges and describes the expected behavior of each component.

Component	Description		
Allink Prosonco	Red		
A-LINK Flesence	Green		
	Red		
	Green		
Reference Detection	Red	Reference Lost	
Reference Delection	Green	Reference Locked	
Potary Switch	Switched the display to view firmware version, IP		
	address and temperature.		





Figure 4-1 : Front Card Edges of 7800EMR-ALINK2



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# 5. SERIAL MENU

To determine or set IP address using the serial port, Connect DB9 cable between the COM port on the 7800EMR-ALINK2 (J6) and the computer. Start the terminal program and configure the ports settings with the parameters in Figure 5-1.

Tera Term: Serial port setur	þ	X	_	
Port:	СОМ1	• ок		
<u>B</u> aud rate:	115200	▼		
<u>D</u> ata:	8 bit			
P <u>a</u> rity:	none	•		
<u>S</u> top:	1 bit	<b>→</b> <u>H</u> elp		
Elow control:	none	•		
Transmit delay O msec <u>/c</u> har O msec <u>/l</u> ine				

Figure 5-1 : COM Port Settings

After establishing serial communication, Main Menu will appear in the terminal window as in Figure 5-2.

📒 COM1:115200baud - Tera Term VT	X
File Edit Setup Control Window Help	
	^
Main Menu A-Link Dual Mode Version 1.00 Buildserver Build 137	
Current Alink Mode: Dual Port Mode (1) Network Configuration (2) SNMP Configuration (3) Audio Configuration (4) Alink Mode Configuration (5) Reference Configuration Menu (6) Show Board Information (7) Show SFP Setup (8) Engineering Debug Utility (9) Save to flash and Reboot (X) Exit )	

Figure 5-2 : Main Menu Prompt



# 5.1. NETWORK CONFIGURATION

Set IP Address	Allows the user to set the IP address.
Set Netmask	Allows the user to set the Netmask address.
Set Gateway	Allows the user to set the Gateway address.
Set Broadcast	Allows the user to set the Broadcast address.
Set DHCP	Allows the user to enable or disable the DHCP.

# 5.2. SNMP CONFIGURATION

Set Trap IP address	Allows the user to set the trap IP address.
Remove Trap IP address	Allows the user to remove the trap IP address.
Community Strings	Allows the user to set the community strings.

# 5.3. AUDIO CONFIGURATION

View Audio Input Packets			
	TDM Channels	Allows the user to view status of TDM Inputs.	
	A-Link Channels	Allows the user to view status of A-Link Inputs.	
View Audio Input Status		•	
	TDM Channels	Allows the user to view status of TDM Inputs in dB.	
	A-Link Channels	Allows the user to view status of A-I ink Inputs in dB	
TDM Port info		Displays the information about TDM Inputs and Outputs	
	-	Displays the information about 1 Div inputs and Outputs	
A-LINK FOR IIIO	Sat Daduadant Mada	7	
	Set Reduildant Mode	Lies Main Dart	
		Use Main Port	
		Use Redundant Port	
		Use both Ports Main is preferred	
		Use both Ports Redundant is preferred	
	Set Quality Tx	Allows the user to set the transmitter quality between 0 -15.	
	Set Address	Allows the user to set port address between 0 -254.	
	Set Sample Rate	Allows the user to set SRC to 48KHz. 96KHz	
Audio TDM Fault Status			
	View Fault	Displays the fault for Silence, Over Amplitude	
	Configuration	Same/Anti phase Loss and Non PCM	
	Comgaratori	Allows the user to enable the above faults per channel	
	Set Fault Enable	or range.	
	Set Fault Threshold	Allows the user to set threshold for silence, over amplitude, same and anti phase.	
	Set Fault Duration	Allows the user to set the fault duration for Silence, Over amplitude and phases, between 1-128 ms.	
	Set Fault Reset Duration	Allows the user the set the trap reset time for Silence, over amplitude, phase, loss and non PCM.	
Audio A-Link Fault Status			
	View Fault	Displays the fault for Silence .Over Amplitude.	
	Configuration	Same/Anti phase, Loss and Non PCM.	
	Set Fault Enable	Allows the user to enable the above faults per channel or range.	
	Set Fault Threshold	Allows the user to set threshold for silence, over amplitude, same and anti phase.	
	Set Fault Duration	Allows the user to set the fault duration for Silence, Over amplitude and phases, between 1-128 ms.	
	Set Fault Reset Duration	Allows the user the set the trap reset time for Silence, over amplitude, phase, loss and non PCM.	
View TDM Channel Pair Status	Allows the user to view the stereo status of TDM Audio Channel		
View A-Link Channel Pair Status	Allows the user to view	v the stereo status of A-Link Audio Channel	



TDM Tone Generator Menu		
	View Tone Gen	Allows the user to view the gain status of tone gen
	Gain/Enable	per channel.
	View Tone Gen	Allows the user to view the status of tone gen per
	Status Info	channel.
	Set Tone Gen	Allows the user to enable or disable the tone gen
	Enable	per channel.
	Set Tone Gen Freq	Allows the user to set tone frequency.
	Set Tone Gen Gain	Allows the user to set the gain per channel.
	Set Tone Gen	Allows the user to invert or un-invert audio phase
	Invert	
A-Link Tone Generator Menu		
	View Tone Gen	Allows the user to view the gain status of tone gen
	Gain/Enable	per channel.
	View Tone Gen	Allows the user to view the status of tone gen per
	Status Info	channel.
	Set Tone Gen	Allows the user to enable or disable the tone gen
	Enable	per channel.
	Set Tone Gen Freq	Allows the user to set tone frequency.
	Set Tone Gen Gain	Allows the user to set the gain per channel.
	Set Tone Gen	Allows the user to invert or un-invert audio phase
	Invert	

#### 5.4. A-LINK MODE CONFIGURATION

Redundancy Mode	Allows the user to select Redundancy Mode.
Dual Port Mode	Allows the user to select Dual Port Mode.

#### 5.5. REFERENCE CONFIGURATION MENU

View Reference Info	Allows the user to view status of Reference.
Set Primary Reference	Allows the user to set Ref.1 or Ref.2 as primary reference.
Set Reference input 2 source	Allows the user to set the reference source to be the MI or RP.
Set Reference Swap Mode	Allows the user to swap the reference manually or set it to Auto upon failure.
Set Video Reference Standard	Allows the user to select the reference standard if it is Video.
Reset Reference Swap count	Allows the user to reset the swap counter.
Reset PLL Drop count	Allows the user to reset the PLL drop count.
Reset Reference Drop count	Allows the user to reset the reference drop count.

# 5.6. SHOW BOARD INFORMATION

Displays all the information about the Firmware version, Temperature and LEDs.

# 5.7. SHOW SFP SETUP

Show SFP Status Allows the user to view the status of SFP's.

# 5.8. ENGINEERING DEBUG UTILITY

This menu is used for Debugging purposes only.

### 5.9. SAVE TO FLASH AND REBOOT

When changes are made, this option is selected to save the changes to the flash and reboot the card.



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# 6. VISTALINK® PRO CONFIGURATION

This chapter assumes that the VistaLINK<sub>®</sub> PRO server and client are already configured for your network and user must have basic knowledge of the VistaLINK<sub>®</sub> PRO interface. It also assumes that the user or network administrator has already added the appropriate jar file to the server, and both the client and server applications have been restarted. 7800EMR-ALINK2 can communicate to VLPro using the control port of the card and appropriate Jar file. Open VistaLINK® PRO and click on the refresh tree icon. Select the IP address of 7800EMR-ALINK2 and right click to "View Configuration..." Depending on which mode the 7800EMR-ALINK2 is set to, the tab menu options in VistaLINK® PRO differ slightly. In section 6.1 and 6.2 both dual port mode and redundancy mode tab menus will be outlined respectively.

### 6.1. DUAL PORT MODE

When the 7800EMR-ALINK2 is operating in dual port mode the VistaLINK® PRO tab menus options will be displayed as outlined below.

#### 6.1.1. GENERAL

The General tab displays the information about the Card, Frame Reference of Port 1 & 2 and Frame Reference trap status.

	T.			· · ·		
eneral ALINK TDM	Monitor Status Audio Mono (	Config	Audio Stereo Config Audio	Channel Faults	Audio Channel Pair Faul	IS
Port 1 Video Standard	Auto		Port 2 Video Standard	Auto		
Port 1 Present			Port 2 Present			
Port 1 Video Standard			Port 2 Video Standard			
Primary Reference Source	Reference Input 1	•	Fail Safe Mode	Auto	V	
Frame Ref Port In Use			Frame Ref Error Count			
Ref Input 2 Source	Rear Panel	v		Reset Erro	r Count	
Port 1 Drop Count			Port 2 Drop Count			
	Port 1 Reset Drop Coun	it		Port 2 Reset [	)rop Count	
Card Status						
Card Type	7800EMR-ALINK2		Card Channel Pair Count			
Card Alink Mode			Card Channel Count		1280	
Frame Ref Trap Enable			Frame Ref Trap Status			
Frame Ref Status 1			Frame Ref Status 1			
Frame Ref Status 2			Frame Ref Status 2			

Figure 6-1 : Dual Port Mode - VistaLINK $_{\ensuremath{\mathbb{S}}}$  - General



### **Reference**

For Port 1 and Port2

Video Standard: Allows selecting the reference Standard from NTSC, PAL or Auto.

**Present:** Displays whether the Video reference is Present or Absent.

Video Standard: Displays the standard of the Video Reference.

**Primary Reference Source:** Allows to select the Primary Reference from Reference Port 1 or Reference Port 2.

Frame Ref Port In Use: Shows which Reference Port is in use (Reference Port 1 or Reference Port 2).

Ref Input 2 Source: Allows to select the Reference source, Frame or Rear Plate.

Port 1 Drop Count: Displays the Drop or Error Count of the Reference.

Port 1 Reset Drop Count: Button is used to reset the Drop or Error count of the reference.

Fail Safe Mode: Allows to configure the Reference fail safe mode, Fixed, Single Swap or Auto Mode.

Frame Ref Error Count: Shows the Error count of the Reference.

**Reset Error Count:** Button used to reset the Frame Reference Error Count.

**Port 2 Drop Count:** Displays the Drop or Error Count of the Reference.

Port 2 Reset Drop Count: Button is used to reset the Drop or Error count of the reference.

#### Card Status

**Card Type:** Displays the name of the card.

Card A-Link Mode: Displays which mode the card is current set to.

Card Channel Pair Count: Displays the Stereo Channel of the Card.

Card Channel Count: Displays the Mono Channel of the Card.

#### Frame Ref Trap and Status

Frame Ref Status 1: Raises a trap when a reference signal is removed from reference input 1. Frame Ref Status 2: Raises a trap when a reference signal is removed from reference input 2.



# 6.1.2. A-LINK CONTROL

The A-Link Control section displays the status, control and A-Link Tone Generator.

172.21.1.80, 7800-Alink2: Configuration						
Full Refresh 😋 💲 1.0 Apply 🔸 🔹	Status Completed (14:25:54	2017-07-26)	Logger 📕			
General ALINK TDM Monitor	Status Audio Mono Config	Audio Stereo Config	Audio Channel Faults	Audio Channel P	air Faults	
Input Status						
	Port 1		Port 2			
ALINK Input Active						
ALINK Input Locked						
ALINK Input Quality						
ALINK Input Port						
ALINK Input Channels Received						
ALINK Input Sample Rate			40 VU <del>v</del>			
Output Status						
	Port 1		Port 2			
ALINK Output Sample Rate	48 kHz	48 kH	z	<b>V</b>		
ALINK Output Quality		• 15				
ALINK Output Port	•	0				
ALINK Sync Option	Received Sync	▼ Rece	ived Sync	<b>v</b>		
ALINK Channel Channel 1	nd Channel 2		Tana Constants Channel 2	Арру		
ALINK Tone Generator Disable	<b>.</b>	ALIN	K Tone Generator	Disable	T	
ALINK TG Frequency	1000	ALIN	K TG Frequency		1000	
ALINK TG Gain		ALIN	K TG Gain		• •	
ALINK TG Invert Not Inve	ert 🖓		K TG Invert	Not Invert		
Audio ALINK Input Trap Enable			ALINK Input Trap Status			
Audio ALINK Input Present 1			Audio Alink Input Present	1		
Audio ALINK Input Present 2			Audio Alink Input Present	12		

Figure 6-2 : Dual Port Mode - VistaLINK\_ $_{\! \circledast}\text{-}$  ALINK



#### Input Status

For A-Link Port 1 and Port 2

A-Link Input Active: Displays whether there is a valid A-LINK Input or not
A-Link Input Locked: Displays whether the A-LINK is Locked or not
A-Link Input Quality: Displays the quality of the A-LINK Source
A-Link Input Port: Displays the port # of the A-LINK Source
A-Link Input Channels Received: Displays the # of input channels received.
A-Link Input Sample Rate: Displays the input sample rate.

#### Output Status

For A-Link Port 1 and Port 2

A-Link Output Sample Rate: Allows the user to select the output sample rate.
A-Link Output Quality: Allows the user to select the output quality.
A-Link Output Port: Allows the user to select the output port.
A-Link Sync Option: Allows the user to select if the A-Link either generates or receives a Sync reference.

Show A-Link TG Channel: Allows the user to select to which pair of A-Link channels to configure.

**Apply Button:** Apply button allows the user to copy the settings of channel 1 to rest of the mono channels.

#### ALINK Tone Generator Channel 1 & 2

A-Link Tone Generator: Option to enable or disable tone generator per channel.

A-Link TG Frequency: Option to select the frequency of the tone generator.

A-Link TG Gain: Option to change the gain (-dB) of the tone generator.

A-Link TG invert: Option to invert the phase of the tone generator.

#### Audio A-Link Input Trap Enable

Audio A-Link Input Present 1: Option to enable the trap for A-Link Presence for A-Link port 1. Audio A-Link Input Present 2: Option to enable the trap for A-Link Presence for A-Link port 2.

#### Audio A-Link Input Trap Status

Audio A-Link Input Present 1: Displays whether A-Link signal is present. Audio A-Link Input Present 2: Displays whether A-Link signal is present.



# 6.1.3. TDM CONTROL

The TDM Control section displays the TDM Status and TDM Tone Generator.

172.21.1.80, 7800-Alink2: Configuration					
Full Refresh 😋 💲 1.0 Apply	👽 😻 Status Completed (14:	25:54 2017-07-26) 🗙 Logger 🔳			
General ALINK TDM	Monitor Status Audio Mono Co	nfig Audio Stereo Config Audio Channel Faul	ts Audio Channel Pair Faults		
TDM Input 1 of ALINK Port 1		TDM Input 1 of ALINK Port 2			
TDM Input Present 1		TDM Input Present 1			
TDM Input SID Present 1		TDM Input SID Present 1			
TDM Input SID IP Address 1		TDM Input SID IP Address 1			
TDM Input SID Port Number 1		TDM Input SID Port Number 1			
TDM Input SID Description 1		TDM Input SID Description 1			
TDM Input Error Count 1		TDM Input Error Count 1			
	TDM Input Reset Error Count 1		TDM Input Reset Error Count 1		
TDM Input 2 of ALINK Port 1		TDM Input 2 of ALINK Port 2			
TDM Input Present 2					
TOM Input SID Present 2		TOM Input SID Present 2			
TDM Input SID IP Address 2		TDM Input SID IP Address 2			
TDM Input SID Port Number 2		TDM Input SID Port Number 2			
TDM Input SID Description 2		TDM Input SID Description 2			
TDM Input Error Count 2		TDM Input Error Count 2			
	TDM Input Reset Error Count 2		TDM Input Reset Error Count 2		
Output SID Status					
TDM Output SID IP Address					
TDM Output SID Port Number					
TDM Output SID Description					
Show TDM Channel	Channel 1 and Channel 2	Apply Channel 1 Settings to All	Apply		
TDM Tone Generator Channel 1		TDM Tone Generator Channel 2			
Tone Generator	Disable	Tone Generator	Disable		
TG Frequency	1000	TG Frequency	1000		
TG Gain		TG Gain	e		
TG Invert	Not invert	TG Invert	Not Invert		
Audio TDM Input Trap Enable		Audio TDM Input Trap Status			
Audio TDM Input Prese	ent 1 of ALINK Port 1	Audio TDM Input Presei	nt 1 of ALINK Port 1		
Audio TDM Input Error	ed 1 of ALINK Port 1	Audio TDM Input Errore	d 1 of ALINK Port 1		
Audio TDM Input Prese	ent 2 of ALINK Port 1	Audio TDM Input Presei	nt 2 of ALINK Port 1		
Audio TDM Input Error	Audio TDM Input Errored 2 of ALINK Port 1				
Audio TDM Input Press	Audio TDM Input Present 1 of ALINK Port 2				
Audio TDM Input From	ed 1 of ALINK Port 2		d 1 of ALINK Port 2		
Audia TDM las 4 2	and 2 of ALINK Dort 2		at 2 of ALINK Dect 2		
Audio TDM input Prese	ent 2 of ALINK PULZ	Audio TDM Input Preser			
Audio TDM Input Error	ed 2 of ALINK Port 2	Audio TDM Input Errore	d 2 of ALINK Port 2		

# Figure 6-3 : Dual Port Mode - VistaLINK\_ $\!\!\!_{\odot}\mbox{-}\mbox{TDM}$ Control



## TDM Input 1 of A-Link Port 1

TDM Input Present 1: Displays whether the TDM Signal is detected on TDM Input 1 of A-Link Port 1.
TDM Input SID Present 1: Displays whether the TDM Signal has Source ID or not.
TDM Input SID IP Address 1: Displays the IP Address of the TDM Source.
TDM Input SID Port Number 1: Displays the Port # of the TDM Source.
TDM Input SID Description 1: Displays the description of the incoming TDM.
TDM Input Error Count 1: Displays the Error Count of the TDM signal on TDM Input 1 of A-Link Port 1.
TDM Input Reset Error Count 1: Button is used to reset the Error Count of the TDM Signal.

#### TDM Input 1 of A-Link Port 2

TDM Input Present 1: Displays whether the TDM Signal is detected on TDM Input 1 of A-Link Port 2.
TDM Input SID Present 1: Displays whether the TDM Signal has Source ID or not.
TDM Input SID IP Address 1: Displays the IP Address of the TDM Source.
TDM Input SID Port Number 1: Displays the Port # of the TDM Source.
TDM Input SID Description 1: Displays the description of the incoming TDM.
TDM Input Error Count 1: Displays the Error Count of the TDM signal on TDM Input 1 of A-Link Port 2.
TDM Input Reset Error Count 1: Button is used to reset the Error Count of the TDM Signal.

#### TDM Input 2 of A-Link Port 1

TDM Input Present 2: Displays whether the TDM Signal is detected on TDM Input 2 of A-Link Port 1.
TDM Input SID Present 2: Displays whether the TDM Signal has Source ID or not.
TDM Input SID IP Address 2: Displays the IP Address of the TDM Source.
TDM Input SID Port Number 2: Displays the Port# of the TDM Source.
TDM Input SID Description 2: Displays the description of the incoming TDM.
TDM Input Error Count 2: Displays the Error Count of the TDM signal on TDM Input 2 of A-Link Port 1.
TDM Input Reset Error Count 2: Button is used to reset the Error Count of the TDM Signal.

#### TDM Input 2 of A-Link Port 2

TDM Input Present 2: Displays whether the TDM Signal is detected on TDM Input 2 of A-Link Port 2.
TDM Input SID Present 2: Displays whether the TDM Signal has Source ID or not.
TDM Input SID IP Address 2: Displays the IP Address of the TDM Source.
TDM Input SID Port Number 2: Displays the Port# of the TDM Source.
TDM Input SID Description 2: Displays the description of the incoming TDM.
TDM Input Error Count 2: Displays the Error Count of the TDM signal on TDM Input 2 of A-Link Port 2.
TDM Input Reset Error Count 2: Button is used to reset the Error Count of the TDM Signal.



**TDM Output SID IP Address:** Displays the IP Address of 7800EMR-A-LINK 2. **TDM Output SID Port Number:** Displays the TDM Output Port # of 7800EMR-A-LINK 2. **TDM Output SID Description:** Displays the description of outgoing TDM.

# TDM Tone Generator Channel 1&2

Show A-Link TDM TG Channel: Allows the user to select to which pair of TDM channels to configure.

Apply Channel 1 Settings to All: Allows the user to apply chanel 1 setting to the rest of the mono channels.

**Tone Generator:** Option to enable to disable tone generator per channel.

**TG Frequency:** Option to select tone generator frequency (Hz).

**TG Gain:** Option to change the gain (-dB) for the tone.

**TG Invert:** Option to invert the phase for the tone.

### Audio TDM Input Trap Enable

Audio TDM Input Present 1 of A-Link Port 1: Option to enable the trap for TDM presence for port 1.
Audio TDM Input Errored 1 of A-Link Port 1: Option to enable the trap for TDM Error for port 1.
Audio TDM Input Present 2 of A-Link Port 1: Option to enable the trap for TDM presence for port 1.
Audio TDM Input Errored 2 of A-Link Port 1: Option to enable the trap for TDM Error for port 1.
Audio TDM Input Present 1 of A-Link Port 2: Option to enable the trap for TDM presence for port 1.
Audio TDM Input Present 1 of A-Link Port 2: Option to enable the trap for TDM presence for port 1.
Audio TDM Input Errored 1 of A-Link Port 2: Option to enable the trap for TDM Error for port 1 and 2.
Audio TDM Input Present 2 of A-Link Port 2: Option to enable the trap for TDM presence for port 1 and 2.
Audio TDM Input Errored 2 of A-Link Port 2: Option to enable the trap for TDM Error for port 1 and 2.

#### TDM Input Trap Status

Audio TDM Input Present 1 of A-Link Port 1: Displays if TDM signal is present for A-Link port 1.

Audio TDM Input Errored 1of A-Link Port 1: Displays if there is any TDM signal error for A-Link port 2.

Audio TDM Input Present 2 of A-Link Port 1: Displays whether TDM signal is present and if there is any error for A-Link port 1.

Audio TDM Input Errored 2 of A-Link Port 1: Displays whether TDM signal is present and if there is any error for A-Link port 2.

Audio TDM Input Present 1of A-Link Port 2: Displays whether TDM signal is present and if there is any error for A-Link port 1.

Audio TDM Input Errored 1of A-Link Port 2: Displays whether TDM signal is present and if there is any error for A-Link port 2.

Audio TDM Input Present 2 of A-Link Port 2: Displays whether TDM signal is present and if there is any error for A-Link port 1.

Audio TDM Input Errored 2 of A-Link Port 2: Displays whether TDM signal is present and if there is any error for A-Link port 2.



#### 6.1.4. MONITOR STATUS

The Monitor Status section allows the user to monitor the status of A-LINK and TDM Signal and also the audio.

10	172.21.1.8	0, 7800-Alink2: Configuration		_ 🗆 X
Full Refresh 🔇 🔇 1.0 Apply	👲 😻 Status Completed (14:25:54	2017-07-26) 🗙 Logger 📕		
General ALINK TDM	Monitor Status Audio Mono Config	Audio Stereo Config Audio Chan	nel Faults Audio Channel Pair Faults	
Show Channels for TDM & ALINK	Channel 1 and Channel 2	<b>T</b>		
TDM & ALINK Channel 1 of ALin	k Port 1	TDM & ALINK Channel 2 of ALink Po		
Audio TDM Signal Present		Audio TDM Signal Present		
Audio ALINK Signal Present		Audio ALINK Signal Present		
Audio TDM Signal Level		Audio TDM Signal Level		
Audio ALINK Signal Level		Audio ALINK Signal Level		
TDM & ALINK Channel 1 of ALin	k Port 2	TDM & ALINK Channel 2 of ALink Po	rt 2	
Audio TDM Signal Present		Audio TDM Signal Present		
Audio ALINK Signal Present		Audio ALINK Signal Present		
Audio TDM Signal Level		Audio TDM Signal Level		
Audio ALINK Signal Level		Audio ALINK Signal Level		

Figure 6-4 : Dual Port Mode - VistaLINK<sub>®</sub> - Monitor Status

#### TDM & A-LINK Channel 1&2 of A-LINK Port 1&2

**Show Channels for TDM & A-Link:** Allows the user to select the channels to see the status of TDM, A-Link and Audio Signal Levels.

Audio TDM Signal Present: Displays whether the TDM signal is present.

Audio A-Link Signal Present: Displays whether the A-Link signal is present.

Audio TDM Signal Level: Displays the Audio TDM signal Level.

Audio TDM Signal Level: Displays the Audio TDM signal Level.

Audio A-Link Signal Level: Displays the Audio A-Link signal Level.



# 6.1.5. AUDIO MONO CONFIG

The Audio Mono Config section allows the user to set the audio fault threshold for TDM and A-Link ports.

<b>101</b>	172.21.1.80	), 7800-Alink2: Configuration	
Full Refreen 😋 🕄 1.0 Apply 📢	🖌 😻 Status Completed (14:25:54	2017-07-28) 🔀 Logger 🔳	
General ALINK TDM	Monitor Status Audio Mono Config	Audio Stereo Config Audio Channel Faults	Audio Channel Pair Faults
		ALINK PORT 1	
Show Channel for TDM	Channel 1 and Channel 2	Apply TDM Channel 1 Settings to All TDM Channels	Apply
TDM Loss Reset Duration	10	TDM Loss Reset Duration	
TDM Silence Level	-60	TDM Silence Level	-60
TDM Silence Duration	0 10	TDM Silence Duration	
TDM Silence Reset Duration		TDM Silence Reset Duration	
TDM Over Level		TDM Over Level	
TDM Over Duration	5	TDM Over Duration	
TDM Over Reset Duration		TDM Over Reset Duration	10
Show Channel for ALINK	Channel 1 and Channel 2	Apply ALINK Channel 1 Settings to All ALINK Channel	els Apply
ALINK Channel 1 of ALINK Port 1		ALINK Channel 2 of ALINK Port 1	
ALINK Loss Reset Duration	10	ALINK Loss Reset Duration	
ALINK Silence Level		ALINK Silence Level	-60
ALINK Silence Duration	-• 10	ALINK Silence Duration	
ALINK Silence Reset Duration	<b>0</b>	ALINK Silence Reset Duration	10
ALINK Over Level		ALINK Over Level	<u>م</u> •
ALINK Over Duration	•	ALINK Over Duration	
ALINK Over Benet Duration			
ALINK OVER Reset Duration	10		10
		ALINK PORT 2	
Show Channel for TDM	Channel 1 and Channel 2	Apply TDM Channel 1 Settings to All TDM Channels	Apply
TDM Loss Reset Duration	10	TDM Loss Reset Duration	
TDM Silence Level	0	TDM Silence Level	-60
TDM Silence Duration	• 10	TDM Silence Duration	10
TDM Silence Reset Duration		TDM Silence Reset Duration	
TDM Over Level		TDM Over Level	
TDM Over Duration	• •		
TOM Over Datation			
Tom Over Reset Duration			10
Show Channel for ALINK	Channel 1 and Channel 2	Apply ALINK Channel 1 Settings to All ALINK Channel	els Apply
		ALINK Channel 2 of ALINK Port 2	
ALINK Loss Reset Duration	10	ALINK Loss Reset Duration	
ALINK Silence Level	-60	ALINK Silence Level	-60
ALINK Silence Duration	10	ALINK Silence Duration	
ALINK Silence Reset Duration	<b>0</b> 10	ALINK Silence Reset Duration	
ALINK Over Level	•6	ALINK Over Level	
ALINK Over Duration	• 5	ALINK Over Duration	5
ALINK Over Reset Duration		ALINK Over Reset Duration	10

Figure 6-5 : Dual Port Mode - VistaLINK\_ ${\!\scriptscriptstyle \circledcirc}$  - Audio Mono Config



# TDM Audio Fault Definition for Channel 1 & 2 of Port 1 & 2

Show TDM Fault Definition Channel: Allows the user to select the mono channels to set the fault definitions.

Apply button: Apply button is to set the mono channel 1 settings to rest of the mono channels.

**TDM Loss Reset Duration:** Option to check audio for this many sec. before the fault is reset.

**TDM Silence Level:** Option to set the level that is considered silence.

TDM Silence Duration: Option to check audio for this many samples before it is declared "silence".

**TDM Silence Reset Duration:** Option to check silence duration for this many sec. before the fault is reset.

**TDM Over Level:** Option to set the audio level that is considered "over".

TDM Over Duration: Option to check audio for this many samples before it is declared "over".

**TDM Over Reset Duration:** Option to check over duration for this many sec. before the fault is reset.

#### A-Link Audio Fault Definition for Channel 1 & 2 of Port 1 & 2

Show TDM Fault Definition Channel: Allows the user to select the mono channels to set the fault definitions.

Apply Button: Apply button is to set the mono channel 1 settings to rest of the mono channels.

A-Link Loss Reset Duration: Option to check audio for this many sec. before the fault is reset.

A-Link Silence Level: Option to set the level that is considered silence.

A-Link Silence Duration: Option to check audio for this many samples before it is declared "silence".

A-Link Silence Reset Duration: Option to check silence duration for this many sec. before the fault is reset.

A-Link Over Level: Option to set the audio level that is considered "over".

A-Link Over Duration: Option to check audio for this many samples before it is declared "over".

A-Link Over Reset Duration: Option to check over duration for this many sec. before the fault is reset.



# 6.1.6. AUDIO STEREO CONFIG

The Audio Stereo Config section allows the user to set the audio fault threshold for TDM and A-Link ports.

		А	LINK PORT 2	
Show Channel Pair for TDM	Channel 1/2	T	Apply TDM Channel 1/2 Settings to All TDM Channel Pairs	Apply
TDM Channel 1/2 of ALINK Port 2				
TDM Pair Phase Reversal Level			<b>10</b>	
TDM Pair Phase Reversal Duration	-0		= 10	
TDM Pair Phase Reversal Reset Du	iration 🛛 🔍		= 10	
TDM Pair Mono Level		•	90	
TDM Pair Mono Duration	-0		<sup>≥</sup> 10	
TDM Pair Mono Reset Duration	-•		= 10	
Show Channel Pair for ALINK	Channel 1/2	T	Apply ALINK Channel 1/2 Settings to All ALINK Channel Pairs	Apply
ALINK Channel 1/2 of ALINK Port 2				
ALINK Pair Phase Reversal Level			<sup>⇒</sup> 10	
ALINK Pair Phase Reversal Duratio	in =0		= 10	
ALINK Pair Phase Reversal Reset I	Duration 🛛 🔍		≥ 10	
ALINK Pair Mono Level		•	90	
ALINK Pair Mono Duration	-•		<b>10</b>	
ALINK Pair Mono Reset Duration	-•		= 10	

Figure 6-6 : Dual Port Mode - VistaLINK<sub>®</sub> - Audio Stereo Config

#### TDM Audio Fault Definition for Port 1&2

**Show TDM Fault Definition Channel:** Allows the user to select the TDM stereo channel to set the fault definitions.

Apply Button: Apply button is to set the TDM stereo channel 1/2 settings to rest of the stereo channels.

TDM Pair Phase Reversal Level: Sets the ratio of the pair at which it is declared out of phase.

**TDM Pair Reversal Duration:** Sets the duration before the signal is declared out of phase.

**TDM Pair Phase Reversal Reset Duration:** Sets the duration before the phase detection begins monitoring again.

**TDM Pair Mono Level:** Sets the ratio of the pair at which it is declared mono.

**TDM Pair Mono Duration:** Sets the duration before the signal is declared mono.

TDM Pair Mono Reset Duration: Sets the duration before the mono detection begins monitoring again.



### TDM Audio Definition for Port 1&2

**Show A-Link Fault Definition Channel:** Allows the user to select the A-Link stereo channel to set the fault definitions.

Apply Button: Apply button is to set the TDM stereo channel 1/2 settings to rest of the stereo channels.

A-Link Pair Phase Reversal Level: Sets the ratio of the pair at which it is declared out of phase.

A-Link Pair Reversal Duration: Sets the duration before the signal is declared out of phase.

A-Link Pair Phase Reversal Reset Duration: Sets the duration before the phase detection begins monitoring again.

A-Link Pair Mono Level: Sets the ratio of the pair at which it is declared mono.

A-Link Pair Mono Duration: Sets the duration before the signal is declared mono.

A-Link Pair Mono Reset Duration: Sets the duration before the mono detection begins monitoring again.



# 6.1.7. AUDIO CHANNEL FAULTS

The Audio Pair Faults section allows the user to Enable or Disable the Phase Reversal traps and Mono traps.

🖙 172.21.1.80, 7800-Alink2: Configuration						
Full Refresh 😋 💲 1.0 Apply 🛨 🤮	V Status Completed (14:25:54 201	7-07-26) 🔀 Logger 🧮				
General ALINK TDM Monit	or Status Audio Mono Config	Audio Stereo Config Audio Channel Faults Audi	o Channel Pair Faults			
	ΔΤ	INK PORT 1				
Show Channel for TDM	Channel 1 and Channel 2	Apply TDM Channel 1 Settings to All Appl	/			
Audio TDM Chan Loss	Audio TDM Chan Loss	Audio TDM Chan Loss Audio	TDM Chan Loss			
Audio TDM Chan Silent	Audio TDM Chan Silent	Audio TDM Chan Silent Audio	TDM Chan Silent			
Audio TDM Chan Over	Audio TDM Chan Over	Audio TDM Chan Over Audio	TDM Chan Over			
Show Channel for ALINK	Channel 1 and Channel 2	Apply ALINK Channel 1 Settings to All Appl	y			
Audio ALINK Trap 1 Enable Port 1	Audio ALINK Trap 1 Status Port 1	Audio ALINK Trap 2 Enable Port 1 Audio ALINK T				
Audio ALINK Chan Loss	Audio ALINK Chan Loss	Audio ALINK Chan Loss Audio	ALINK Chan Loss			
Audio ALINK Chan Silent	Audio ALINK Chan Silent	Audio ALINK Chan Silent Audio	ALINK Chan Silent			
Audio ALINK Chan Over	Audio ALINK Chan Over	Audio ALINK Chan Over Audio	ALINK Chan Over			
		NIZ DODT 4				
	A1					
Show Channel for TDM	Channel 1 and Channel 2	Apply TDM Channel 1 Settings to All Apply	/			
Audio TDM Chan Loss	Audio TDM Chan Loss	Audio TDM Chan Loss Audio	TDM Chan Loss			
Audio TDM Chan Silent	Audio TDM Chan Silent	Audio TDM Chan Silent Audio	TDM Chan Silent			
Audio TDM Chan Over	Audio TDM Chan Over	Audio TDM Chan Over Audio	TDM Chan Over			
Show Channel for ALINK	Channel 1 and Channel 2	Apply ALINK Channel 1 Settings to All Appl				
Audio ALINK Trap 1 Enable Port 2	Audio ALINK Trap 1 Status Port 2	Audio ALINK Trap 2 Enable Port 2 Audio ALINK T				
Audio ALINK Chan Loss	Audio ALINK Chan Loss	Audio ALINK Chan Loss Audio	ALINK Chan Loss			
Audio ALINK Chan Silent	Audio ALINK Chan Silent	Audio ALINK Chan Silent Audio	ALINK Chan Silent			
Audio ALINK Chan Over	Audio ALINK Chan Over	Audio ALINK Chan Over Audio	ALINK Chan Over			

Figure 6-7 : Dual Port Mode - VistaLINK<sub>®</sub> - Audio Channel Faults

Show TDM Audio Fault Channels: Allows the user to select the TDM channels to enable the traps. Apply Button: Apply button is to set the channel 1 settings to rest of the TDM channels.

#### TDM Trap Enable For A-Link Port 1 & 2

Audio Channel Loss: Option to enable the trap for audio channel loss.

Audio Channel Silent: Option to enable the trap for audio channel silent.

Audio Channel Over: Option to enable the trap for audio channel over.

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### TDM Fault Status For A-Link Port 1 & 2

Audio Channel Loss: Option to display whether the audio is Lost.Audio Channel Silent: Option to display whether the audio is silent.Audio Channel Over: Option to display whether the audio is over.

#### A-Link Trap Enable For A-Link Port 1 & 2

Audio Channel Loss: Option to enable the trap for audio channel loss.Audio Channel Silent: Option to enable the trap for audio channel silent.Audio Channel Over: Option to enable the trap for audio channel over.

#### A-Link Fault Status For A-Link Port 1 & 2

Audio Channel Loss: Option to display whether the audio is Lost.Audio Channel Silent: Option to display whether the audio is silent.Audio Channel Over: Option to display whether the audio is over.



### 6.1.8. AUDIO CHANNEL PAIR FAULTS

The Audio Pair Faults section allows the user to Enable or Disable the Phase Reversal traps and Mono traps.

172.21.1.80, 7800-Alink2: Configuration					
Full Refresh 🔉 🗘 1.0 Apply 🞍 🖠	Status Completed (14:	25:54 2017-07-26) 🗙 Logger 📕			
General ALINK TDM Monitor	Status Audio Mono Co	n fig Audio Stereo Con fig Audio Channel Faults Audio Ch	annel Pair Faults		
		ALINK PORT 1			
Show Channel Pair for TDM	Channel 1/2	Apply IDM Channel 1/2 Settings to All	pply		
Audio Trap TDM Channel 1/2 Enable Port 1		Audio Trap TDM Channel 1/2 Status Port 1			
Audio TDM Chan Pair Phase Reve	rsal	Audio TDM Chan Pair Phase Reversal			
Audio TDM Chan Pair Mono		Audio TDM Chan Pair Mono			
Show Channel Pair for ALINK	Channel 1/2	Apply ALINK Channel 1/2 Settings to All	pply		
Audio Trap ALINK Channel 1/2 Enable Port		Audio Tran Al INK Channel 1/2 Status Port 1			
Audio ALINK Chan Pair Phase Rev	versal	Audio ALINK Chan Pair Phase Reversal			
Audio ALINK Chan Pair Mono		Audio ALINK Chan Pair Mono			
		ALINK PORT 2			
Channel Daie for TDM	Channel (12)	The Arch Thil Changel (2) Collings to All			
	Channel 1/2	Apply IDM Channel 1/2 Settings to All	рру		
Audio Trap TDM Channel 1/2 Enable Port 2	roal	Audio Trap TDM Channel 1/2 Status Port 2			
	ISal				
Audio TDM Chan Pair Mono		Audio TDM Chan Pair Mono			
Channe Changer I Daire for All NIV	Changel ( D				
Show Channel Pair for ALINK	Channel 1/2	Apply ALINK Channel 1/2 Settings to All	рру		
Audio Trap ALINK Channel 1/2 Enable Port	/	Audio Trap ALINK Channel 1/2 Status Port 2			
	ursur -				
Audio ALINK Chan Pair Mono		Audio ALINK Chan Pair Mono			

Figure 6-8 : Dual Port Mode VistaLINK $_{\!\otimes}$  - Audio Channel Pair Faults

#### TDM Channels for A-Link Port 1 & Port 2

Show Audio Fault Channels: Allows the user to select which TDM channels to enable traps on.

**Apply Button:** The apply button applies the channel 1 settings to the rest of the TDM channels.

**Trap Enable: Phase Reversal:** Allows the user to enable traps to be sent out when a phase reversal fault is detected on the selected audio pair.

**Trap Status: Phase Reversal:** Status monitor displays fault condition on the audio pairs. Green indicates no faults while red indicates a triggered fault condition.

**Trap Enable: Mono:** Allows the user to enable traps to be sent out when a fault is detected on a mono channel on the selected audio pair.



**Trap Status: Mono:** Status monitor displays fault condition on the audio pairs. Green indicates no faults while red indicates a triggered fault condition.

#### A-Link Channels for A-Link Port 1 & Port 2

Show Audio Fault Channels: Allows the user to select which A-Link channels to enable traps on.

**Apply Button:** The apply button applies the channel 1 settings to the rest of the A-Link channels.

**Trap Enable: Phase Reversal:** Allows the user to enable traps to be sent out when a phase reversal fault is detected on the selected audio pair.

**Trap Status: Phase Reversal:** Status monitor displays fault condition on the audio pairs. Green indicates no faults while red indicates a triggered fault condition.

**Trap Enable: Mono:** Allows the user to enable traps to be sent out when a fault is detected on a mono channel on the selected audio pair.

**Trap Status: Mono:** Status monitor displays fault condition on the audio pairs. Green indicates no faults while red indicates a triggered fault condition.



### 6.2. REDUNDANCY MODE

When the 7800EMR-ALINK2 is operating in dual port mode the VistaLINK® PRO tab menus options will be displayed as outlined below

#### 6.2.1. GENERAL TAB

The General tab displays the information about the Card, Frame Reference of Port 1 & 2 and Frame Reference trap status.

	172.2	1.1.80, 7800-Alink2: Configuration		_ 🗆 ×
Full Refresh 😋 💲 1.0 Apply 🖠	😻 Status Completed (14:22	2:18 2017-07-26) 🗙 Logger 📃		
General ALINK TDM I	Ionitor Status Audio Mono Cont	fig Audio Stereo Config Audio	Channel Faults Audio Channel Pair Faul	lts
Port 1 Video Standard	Auto	Port 2 Video Standard	Auto 🔽	
Port 1 Present		Port 2 Present		
Port 1 Video Standard		Port 2 Video Standard		
Primary Reference Source	Reference Input 1	Fail Safe Mode	Auto 🔽	
Frame Ref Port In Use		Frame Ref Error Count		
Ref Input 2 Source	Rear Panel	T	Reset Error Count	
Port 1 Drop Count		Port 2 Drop Count		
	Port 1 Reset Drop Count		Port 2 Reset Drop Count	
Card Status				
Card Type	7800EMR-ALINK2	Card Channel Pair Count		
Card Alink Mode		Card Channel Count		
Frame Ref Trap Enable		Frame Ref Trap Status		
Frame Ref Status 1		Frame Ref Status 1		
Frame Ref Status 2		Frame Ref Status 2		

Figure 6-9 : Redundancy Mode - VistaLINK<sub>®</sub> - General

#### **Reference**

For Port 1&2

Video Standard: Allows to select the reference Standard from NTSC, PAL or Auto.

**Present:** Displays whether the Video reference is Present or Absent.

Video Standard: Displays the standard of the Video Reference.

**Primary Reference Source:** Allows to select the Primary Reference from Reference Port 1 or Reference Port 2.

Frame Ref Port In Use: Shows which Reference Port is in use (Reference Port 1 or Reference Port 2).

**Ref Input 2 Source:** Allows to select the Reference source, Frame or Rear Plate.

Port 1 Drop Count: Displays the Drop or Error Count of the Reference.

**Port 1 Reset Drop Count:** Button is used to reset the Drop or Error count of the reference.



Fail Safe Mode: Allows to configure the Reference fail safe mode, Fixed, Single Swap or Auto Mode.

Frame Ref Error Count: Shows the Error count of the Reference.

**Reset Error Count:** Button used to reset the Frame Reference Error Count.

**Port 2 Drop Count:** Displays the Drop or Error Count of the Reference.

Port 2 Reset Drop Count: Button is used to reset the Drop or Error count of the reference.

#### Card Status

Card Type: Displays the name of the card.Card A-Link Mode: Displays which mode the card is current set to.Card Channel Pair Count: Displays the Stereo Channel of the Card.

Card Channel Count: Displays the Mono Channel of the Card.

#### Frame Ref Trap & Status

Frame Ref Status 1: Raises a trap when a reference signal is removed from reference input 1. Frame Ref Status 2: Raises a trap when a reference signal is removed from reference input 2.



# 6.2.2. A-LINK CONTROL

The A-Link Control section displays the status, control and A-Link Tone Generator

	172.2	1.1.80, 7800-Alink2: (	Configuration		<b>□</b> □ ×
Full Refresh 😋 🗘 1.0 Apply 🖠 😻	Status Completed (09:2		🔀 Logger 🔳		
General ALINK TDM Monitor	Status Audio Mono Con	fig Audio Sterei	o Config Audio Channel F	aults Audio Channel	Pair Faults
Input Status					
	Port 1		Port 2		
ALINK Input Active					
ALINK Input Locked					
ALINK Input Quality					
ALINK Input Port					
ALINK Input Channels Received					
ALINK Input Sample Rate			48 kHz		
Output Status					
	Port 1		Port 2	_	
ALINK Output Sample Rate	48 kHz	V	48 kHz	•	
ALINK Output Quality		• 15		€ <sub>15</sub>	
ALINK Output Port	•		•		
ALINK Redun Mode	Both Main Primary	T	Both Main Primary	T	
ALINK Sync Option	Received Sync	V	Received Sync		
Show ALINK Channel Channel 1 au	nd Channel 2		Apply Channel 1 Settings to All	An	
ALINK Tone Generator Channel 1			ALINK Tone Generator Chanr	nel 2	.,
ALINK Tone Generator Disable	-		ALINK Tone Generator	Disable	<b>T</b>
ALINK TG Frequency	1000		ALINK TG Frequency		1000
ALINK TG Gain			ALINK TG Gain		● _6
ALINK TG Invert Not Inve	rt 🔽		ALINK TG Invert	Not Invert	
Audio ALINK Input Trap Enable			Audio ALINK Input Trap Statu	s	
Audio ALINK Input Present 1				esent i	
Audio ALINK Input Present 2			Audio Alink Input Pre	esent 2	

Figure 6-10 : Redundancy Mode - VistaLINK $_{\ensuremath{\$}}$  - ALINK



#### Input Status for A-Link Port 1 & Port 2

A-Link Input Active: Displays whether there is a valid A-LINK Input or not.
A-Link Input Locked: Displays whether the A-LINK is Locked or not.
A-Link Input Quality: Displays the quality of the A-LINK Source.
A-Link Input Port: Displays the port # of the A-LINK Source.
A-Link Input Channels Received: Displays the # of input channels received.
A-Link Input Sample Rate: Displays the input sample rate.

#### Output Status for A-Link Port 1 & Port 2

A-Link Output Sample Rate: Allows the user to select the output sample rate.

A-Link Output Quality: Allows the user to select the output quality.

A-Link Output Port: Allows the user to select the output port.

**A-Link Redundancy Mode:** Allows the user to select which mode the A-Link operates in a redundancy instance.

A-Link Sync Option: Allows the user to select if the A-Link either generates or receives a Sync reference.

#### A-Link Tone Generator

Show A-Link TG Channel: Allows the user to select to which pair of A-Link channels to configure.

Apply Button: Apply button allows the user to copy the settings of channel 1 to rest of the mono channels.

A-Link Tone Generator: Option to enable or disable tone generator per channel.

A-Link TG Frequency: Option to select the frequency of the tone generator.

A-Link TG Gain: Option to change the gain (-dB) of the tone generator.

A-Link TG invert: Option to invert the phase of the tone generator.

#### Audio A-Link Input Trap Enable

Audio A-Link Input Present 1: Option to enable the trap for A-Link Presence for A-Link port 1. Audio A-Link Input Present 2: Option to enable the trap for A-Link Presence for A-Link port 2.

#### Audio A-Link Input Trap Status

Audio A-Link Input Present 1: Displays whether A-Link signal is present.

Audio A-Link Input Present 2: Displays whether A-Link signal is present.



# The TDM Control section displays the TDM Status and TDM Tone Generator

8	172.	.21.1.80, 7800-Alink2: Configuration	□ ×
Full Refreeh 😋 💲 1.0 Apply	🛃 😻 Status Completed (09:	:26:38 2017-07-26) 🗙 Logger 📕	
General ALINK TDM	Monitor Status Audio Mono Co	onfig Audio Stereo Config Audio Channel Faults Audio Channel Pair Faults	-
TDM Input 1 of ALINK Port 1		TDM Input 1 of ALINK Port 2	
TDM Input Present 1		TDM Input Present 1 False	
TDM Input SID Present 1		TDM Input SID Present 1 False	
TDM Input SID IP Address 1		TDM Input SID IP Address 1	
TDM Input SID Port Number 1		TDM Input SID Port Number 1 0	
TDM Input SID Description 1		TDM Input SID Description 1	
TDM Input Error Count 1		TDM Input Error Count 1 0	
	TDM Input Reset Error Count 1	TDM Input Reset Error Count 1	
TDM Input 2 of ALINK Port 1	False	TDM Input 2 or ALINK POR 2 TDM Input Present 2 False	
TDN Input SID Brogget 2			
TDM Input SID ID Address 2			
TOM Input SID IP Address 2			
TDM Input SID Port Number 2			
TDM Input SID Description 2		TDM Input SID Description 2	
TDM Input Error Count 2		TDM Input Error Count 2 0	
	TDM Input Reset Error Count 2	TDM Input Reset Error Count 2	
Output SID Status			
TDM Output SID IP Address			
TDM Output SID Port Number			
TDM Output SID Description			
Show TDM Channel	Channel 1 and Channel 2	Apply Channel 1 Settings to All Apply	
TDM Tone Generator Channel 1		TDM Tone Generator Channel 2	
Tone Generator	Disable	Tone Generator Disable 🗸	
TG Frequency	1000	TG Frequency 000	
TG Gain	● _6	TG Gain	
TG Invert	Not Invert	TG Invert Not Invert	
Audio TDM Input Trap Enable		Audio TDM Input Trap Status	
Audio TDM Input Prese	nt 1 of ALINK Port 1	Audio TDM Input Present 1 of ALINK Port 1	
Audio TDM Input Errore	ed 1 of ALINK Port 1	Audio TDM Input Errored 1 of ALINK Port 1	
Audio TDM Input Prese	nt 1 of ALINK Port 2	Audio TDM Input Present 1 of ALINK Port 2	
Audio TDM Input Errore	ed 1 of ALINK Port 2	Audio TDM Input Errored 1 of ALINK Port 2	

Figure 6-11 : Redundancy Mode - VistaLINK $_{\ensuremath{\mathbb{S}}}$  - TDM Control



# TDM Input 1 of A-Link Port 1

TDM Input Present 1: Displays whether the TDM Signal is detected on TDM Input 1 of A-Link Port 1.
TDM Input SID Present 1: Displays whether the TDM Signal has Source ID or not.
TDM Input SID IP Address 1: Displays the IP Address of the TDM Source.
TDM Input SID Port Number 1: Displays the Port # of the TDM Source.
TDM Input SID Description 1: Displays the description of the incoming TDM.
TDM Input Error Count 1: Displays the Error Count of the TDM signal on TDM Input 1 of A-Link Port 1.
TDM Input Reset Error Count 1: Button is used to reset the Error Count of the TDM Signal.

#### TDM Input 1 of A-Link Port 2

TDM Input Present 1: Displays whether the TDM Signal is detected on TDM Input 1 of A-Link Port 2.
TDM Input SID Present 1: Displays whether the TDM Signal has Source ID or not.
TDM Input SID IP Address 1: Displays the IP Address of the TDM Source.
TDM Input SID Port Number 1: Displays the Port # of the TDM Source.
TDM Input SID Description 1: Displays the description of the incoming TDM.
TDM Input Error Count 1: Displays the Error Count of the TDM signal on TDM Input 1 of A-Link Port 2.
TDM Input Reset Error Count 1: Button is used to reset the Error Count of the TDM Signal.

#### TDM Input 2 of A-Link Port 1

TDM Input Present 2: Displays whether the TDM Signal is detected on TDM Input 2 of A-Link Port 1.
TDM Input SID Present 2: Displays whether the TDM Signal has Source ID or not.
TDM Input SID IP Address 2: Displays the IP Address of the TDM Source.
TDM Input SID Port Number 2: Displays the Port # of the TDM Source.
TDM Input SID Description 2: Displays the description of the incoming TDM.
TDM Input Error Count 2: Displays the Error Count of the TDM signal on TDM Input 2 of A-Link Port 1.
TDM Input Reset Error Count 2: Button is used to reset the Error Count of the TDM Signal.

#### TDM Input 2 of A-Link Port 2

TDM Input Present 2: Displays whether the TDM Signal is detected on TDM Input 2 of A-Link Port 2.
TDM Input SID Present 2: Displays whether the TDM Signal has Source ID or not.
TDM Input SID IP Address 2: Displays the IP Address of the TDM Source.
TDM Input SID Port Number 2: Displays the Port # of the TDM Source.
TDM Input SID Description 2: Displays the description of the incoming TDM.
TDM Input Error Count 2: Displays the Error Count of the TDM signal on TDM Input 2 of A-Link Port 2.
TDM Input Reset Error Count 2: Button is used to reset the Error Count of the TDM Signal.



#### Output SID Status

**TDM Output SID IP Address:** Displays the IP Address of 7800EMR-A-LINK 2.

**TDM Output SID Port Number:** Displays the TDM Output Port # of 7800EMR-A-LINK 2.

**TDM Output SID Description:** Displays the description of outgoing TDM.

#### TDM Tone Generator

Show A-Link TDM TG Channel: Allows the user to select to which pair of TDM channels to configure.

**Apply Channel 1 Settings to All:** Apply button allows the user to copy the settings of channel 1 to rest of the mono channels.

**Tone Generator:** Option to enable to disable tone generator per channel.

**TG Frequency:** Option to select tone generator frequency.

**TG Gain:** Option to change the gain for the tone.

**TG Invert:** Option to invert the phase for the tone.

#### Audio TDM Input Trap Enable

Audio TDM Input Present 1 of A-Link Port 1: Option to enable the trap for TDM presence for port 1.

Audio TDM Input Errored 1 of A-Link Port 1: Option to enable the trap for TDM Error for port 1 and 2.

Audio TDM Input Present 1of A-Link Port 2: Option to enable the trap for TDM presence for port 1 and 2.

Audio TDM Input Errored 1 of A-Link Port 2: Option to enable the trap for TDM Error for port 1 and 2.

#### TDM Input Trap Status

Audio TDM Input Present 1 of A-Link Port 1: Displays whether TDM signal is present and if there is any error for A-Link port 1.

Audio TDM Input Errored 1 of A-Link Port 1: Displays whether TDM signal is present and if there is any error for A-Link port 2.

Audio TDM Input Present 1of A-Link Port 2: Displays whether TDM signal is present and if there is any error for A-Link port 1.

Audio TDM Input Errored 1 of A-Link Port 2: Displays whether TDM signal is present and if there is any error for A-Link port 2.



### 6.2.4. MONITOR STATUS

The Monitor Status section allows the user to monitor the status of A-LINK and TDM Signal and also the audio signal level.

-	172	2.21.1.80, 7800-Alink2: Configuration 🗕 🗆	×
Full Refresh G 5 1.0 Apply	🛨 😻 Status Completed (09	19:26:38 2017-07-26) 🗙 Logger 📕	
General ALINK TDM	Monitor Status Audio Mono C	Config Audio Stereo Config Audio Channel Faults Audio Channel Pair Faults	
Show Channels for TDM & ALINK	Channel 1 and Char	nnel 2.	
TDM & ALINK Channel 1 of ALink			
Audio TDM Signal Present			
Audio ALINK Signal Present			
Audio TDM Signal Level			
Audio ALINK Signal Level			
TDM & ALINK Channel 1 of ALink	Port 2		
Audio TDM Signal Present			
Audio ALINK Signal Present			
Audio TDM Signal Level			
Audio ALINK Signal Level			

Figure 6-12 : Redundancy Mode - VistaLINK<sub>®</sub> - Monitor Status

#### TDM & A-LINK Channel 1 of A-Link Port 1 & 2

**Show Channels for TDM & A-Link:** Allows the user to select the channels to see the status of TDM, A-Link and Audio Signal Levels.

Audio TDM Signal Present: Displays whether the TDM signal is present.

Audio A-Link Signal Present: Displays whether the A-Link signal is present.

Audio TDM Signal Level: Displays the Audio TDM signal Level.

Audio A-Link Signal Level: Displays the Audio A-Link signal Level.



# 6.2.5. AUDIO MONO CONFIG

The Audio Mono Config section allows the user to set the audio fault threshold for TDM and A-Link ports.

	172.21.1.80	0, 7800-Alink2: Configuration	_ <u>_</u> ×
Full Refresh 🔇 💲 1.0 Apply	🛃 🌿 Status Completed (11:47:26 :	2017-07-26) 🗙 Logger 🧮	
General ALINK TDM	Monitor Status Audio Mono Config	Audio Stereo Config Audio Channel Faults Audio Channel Pair I	Faults
		ALINK PORT 1	
Show Channel for TDM	Channel 1 and Channel 2	Apply TDM Channel 1 Settings to All TDM Channels	ply
TDM Channel 1 of ALINK Dect 1		TDM Channel 2 of ALINK Bort 4	
TDM Loss Reset Duration		TDM Chamler 2 of ALENK Port 1	10
TDM Silence Level		TDM Silence   evel	
TDM Silance Duration	-60		-00
	10		10
TDM Silence Reset Duration	10	TDM Silence Reset Duration	10
TDM Over Level		TDM Over Level	
TDM Over Duration	• 5	TDM Over Duration	
TDM Over Reset Duration	<b>0</b> 10	TDM Over Reset Duration	
Show Channel for ALINK	Channel 1 and Channel 2	Apply ALINK Channel 1 Settings to All ALINK Channels App	ply
ALINK Channel 1 of ALINK Port 1		ALINK Channel 2 of ALINK Port 1	
ALINK Loss Reset Duration	10	ALINK Loss Reset Duration	
ALINK Silence Level	-60	ALINK Silence Level	-60
ALINK Silence Duration	_ <b>_</b>	ALINK Silence Duration	<sup>D</sup> 10
ALINK Silence Reset Duration		ALINK Silence Reset Duration	<sup>5</sup> 10
ALINK Over Level		ALINK Over Level	
ALINK Over Duration	• • • •	ALINK Over Duration	
ALINK Over Depart Duration	· · · · ·	ALINK Over Benet Duretion	
ALINK OVER RESEL DUTALION	10		10
		ALINK PORT 2	
Show Channel for TDM	Channel 1 and Channel 2	Apply TDM Channel 1 Settings to All TDM Channels	ply
		TDM Channel 2 of ALINK Port 2	
TDM Loss Reset Duration	10	TDM Loss Reset Duration	
TDM Silence Level		TDM Silence Level	-60
TDM Silence Duration	- <b>O</b>	TDM Silence Duration	10
TDM Silence Reset Duration	10	TDM Silence Reset Duration	
TDM Over Level		TDM Over Level	
TDM Over Duration	• • •		
TDM Over Denet Duration			
TDM Over Reset Duration	10	TDM Over Reset Duration	10
Show Channel for ALINK	Channel 1 and Channel 2	Apply ALINK Channel 1 Settings to All ALINK Channels	bly
ALINK Loss Reset Duration	10	ALINK Loss Reset Duration	
ALINK Silence Level	-60	ALINK Silence Level	-60
ALINK Silence Duration	10	ALINK Silence Duration	
ALINK Silence Reset Duration	10	ALINK Silence Reset Duration	
ALINK Over Level		ALINK Over Level	
ALINK Over Duration	• 5	ALINK Over Duration	
ALINK Over Reset Duration		ALINK Over Reset Duration	10

Figure 6-13 : Redundancy Mode - VistaLINK® - Audio Mono Config



# TDM Audio Fault Definition for Channel 1 & 2 of Port 1 & 2

Show TDM Fault Definition Channel: Allows the user to select the mono channels to set the fault definitions.

Apply button: Apply button is to set the mono channel 1 settings to rest of the mono channels.

TDM Loss Reset Duration: Option to check audio for this many sec. before the fault is reset.

**TDM Silence Level:** Option to set the level that is considered silence.

TDM Silence Duration: Option to check audio for this many samples before it is declared "silence".

**TDM Silence Reset Duration:** Option to check silence duration for this many sec. before the fault is reset.

**TDM Over Level:** Option to set the audio level that is considered "over".

TDM Over Duration: Option to check audio for this many samples before it is declared "over".

**TDM Over Reset Duration:** Option to check over duration for this many sec. before the fault is reset.

#### A-Link Audio Fault Definition for Channel 1 & 2 of Port 1 & 2

Show A-Link Fault Definition Channel: Allows the user to select the mono channels to set the fault definitions.

Apply button: Apply button is to set the mono channel 1 settings to rest of the mono channels.

A-Link Loss Reset Duration: Option to check audio for this many sec. before the fault is reset.

A-Link Silence Level: Option to set the level that is considered silence.

A-Link Silence Duration: Option to check audio for this many samples before it is declared "silence".

A-Link Silence Reset Duration: Option to check silence duration for this many sec. before the fault is reset.

A-Link Over Level: Option to set the audio level that is considered "over".

A-Link Over Duration: Option to check audio for this many samples before it is declared "over".

A-Link Over Reset Duration: Option to check over duration for this many sec. before the fault is reset.



# 6.2.6. AUDIO STEREO CONFIG

The Audio Stereo Config section allows the user to set the audio fault threshold for TDM and A-Link ports



Figure 6-14 : Redundancy Mode - VistaLINK® - Audio Stereo Config



#### TDM Audio Fault Definition for Port 1 & 2

**Show TDM Fault Definition Channel:** Allows the user to select the TDM stereo channel to set the fault definitions.

Apply Button: Apply button is to set the TDM stereo channel 1/2 settings to rest of the stereo channels.

**TDM Pair Phase Reversal Level:** Sets the ratio of the pair at which it is declared out of phase.

**TDM Pair Reversal Duration:** Sets the duration before the signal is declared out of phase.

**TDM Pair Phase Reversal Reset Duration:** Sets the duration before the phase detection begins monitoring again.

**TDM Pair Mono Level:** Sets the ratio of the pair at which it is declared mono.

**TDM Pair Mono Duration:** Sets the duration before the signal is declared mono.

**TDM Pair Mono Reset Duration:** Sets the duration before the mono detection begins monitoring again.

#### A-LINK Audio Fault Definition for Port 1 & 2

**Show A-LINK Fault Definition Channel:** Allows the user to select the A-Link stereo channel to set the fault definitions.

Apply Button: Apply button is to set the A-Link stereo channel 1/2 settings to rest of the stereo channels.

A-LINK Pair Phase Reversal Level: Sets the ratio of the pair at which it is declared out of phase.

A-LINK Pair Reversal Duration: Sets the duration before the signal is declared out of phase.

A-LINK Pair Phase Reversal Reset Duration: Sets the duration before the phase detection begins monitoring again.

A-LINK Pair Mono Level: Sets the ratio of the pair at which it is declared mono.

A-LINK Pair Mono Duration: Sets the duration before the signal is declared mono.

A-LINK Pair Mono Reset Duration: Sets the duration before the mono detection begins monitoring again.



# 6.2.7. AUDIO CHANNEL FAULTS

The Audio Channel Faults section allows the user to enable and see the status of the faults.

m	172.21.1.80, 7	800-Alink2: Configuration	_ D X
Full Refresh 😋 💲 1.0 Apply 🛨	V Status Completed (11:47:26 201	7-07-26) 🗙 Logger 📕	
General ALINK TDM Mon	itor Status Audio Mono Config	Audio Stereo Config Audio Channel Fa	Audio Channel Pair Faults
	Al	LINK PORT 1	
Show Channel for TDM	Channel 1 and Channel 2	Apply TDM Channel 1 Settings to All	Apply
Audio TDM Trap 1 Enable Port 1	Audio TDM Trap 1 Status Port 1	Audio TDM Trap 2 Enable Port 1	Audio TDM Trap 2 Status Port 1
Audio TDM Chan Loss	Audio TDM Chan Loss	Audio TDM Chan Loss	Audio TDM Chan Loss
Audio TDM Chan Silent	Audio TDM Chan Silent	Audio TDM Chan Silent	Audio TDM Chan Silent
Audio TDM Chan Over	Audio TDM Chan Over	Audio TDM Chan Over	Audio TDM Chan Over
Show Channel for ALINK	Channel 1 and Channel 2	Apply ALINK Channel 1 Settings to All	Apply
Audio ALINK Trap 1 Enable Port 1	Audio ALINK Trap 1 Status Port 1	Audio ALINK Trap 2 Enable Port 1	Audio ALINK Trap 2 Status Port 1
Audio ALINK Chan Loss	Audio ALINK Chan Loss	Audio ALINK Chan Loss	Audio ALINK Chan Loss
Audio ALINK Chan Silent	Audio ALINK Chan Silent	Audio ALINK Chan Silent	Audio ALINK Chan Silent
Audio ALINK Chan Over	Audio ALINK Chan Over	Audio ALINK Chan Over	Audio ALINK Chan Over
		INK BOPT 2	
	A		
Show Channel for TDM	Channel 1 and Channel 2	Apply TDM Channel 1 Settings to All	Apply
Audio TDM Trap 1 Enable Port 2	Audio TDM Trap 1 Status Port 2	Audio TDM Trap 2 Enable Port 2	Audio TDM Trap 2 Status Port 2
Audio TDM Chan Loss	Audio TDM Chan Loss	Audio TDM Chan Loss	Audio TDM Chan Loss
Audio TDM Chan Silent	Audio TDM Chan Silent	Audio TDM Chan Silent	Audio TDM Chan Silent
Audio TDM Chan Over	Audio TDM Chan Over	Audio TDM Chan Over	Audio TDM Chan Over
Show Channel for ALINK	Channel 1 and Channel 2	Apply ALINK Channel 1 Settings to All	Apply
Audio ALINK Trap 1 Enable Port 2	Audio ALINK Trap 1 Status Port 2	Audio ALINK Trap 2 Enable Port 2	Audio ALINK Trap 2 Status Port 2
Audio ALINK Chan Loss	Audio ALINK Chan Loss	Audio ALINK Chan Loss	Audio ALINK Chan Loss
Audio ALINK Chan Silent	Audio ALINK Chan Silent	Audio ALINK Chan Silent	Audio ALINK Chan Silent
Audio ALINK Chan Over	Audio ALINK Chan Over	Audio ALINK Chan Over	Audio ALINK Chan Over

Figure 6-15 : Redundancy Mode - VistaLINK<sub>®</sub> - Audio Channel Faults

**Show TDM Audio Fault Channels:** Allows the user to select the TDM channels to enable the traps. **Apply Button:** Apply button is to set the channel 1 settings to rest of the TDM channels.

#### TDM Trap Enable For A-Link Port 1 & 2

Audio Channel Loss: Option to enable the trap for audio channel loss.

Audio Channel Silent: Option to enable the trap for audio channel silent.



Audio Channel Over: Option to enable the trap for audio channel over.

#### TDM Fault Status For A-Link Port 1 & 2

Audio Channel Loss: Option to display whether the audio is Lost.Audio Channel Silent: Option to display whether the audio is silent.Audio Channel Over: Option to display whether the audio is over.

#### A-Link Trap Enable For A-Link Port 1 & 2

Audio Channel Loss: Option to enable the trap for audio channel loss.Audio Channel Silent: Option to enable the trap for audio channel silent.Audio Channel Over: Option to enable the trap for audio channel over.

#### A-Link Fault Status For A-Link Port 1 & 2

Audio Channel Loss: Option to display whether the audio is Lost.Audio Channel Silent: Option to display whether the audio is silent.Audio Channel Over: Option to display whether the audio is over.



#### 6.2.8. AUDIO CHANNEL PAIR FAULTS

The Audio Pair Faults section allows the user to Enable or Disable the Phase Reversal traps and Mono traps.

<b>E</b>	172.	21.1.80, 7800-Alink2: Configuration	_ 🗆 ×
Full Refresh 🔉 🕄 1.0 Apply 🞍 🔹	Status Completed (11:	47:26 2017-07-26) 🗙 Logger 👅	
General ALINK TDM Monitor	Status Audio Mono Co	nfig Audio Stereo Config Audio Channel Faults Audio	Channel Pair Faults
		ALINK PORT 1	
Show Channel Pair for TDM	Channel 1/2	Apply TDM Channel 1/2 Settings to All	Apply
	Citatilier II2		<u>vitic</u>
Audio Trap TDM Channel 1/2 Enable Port 1		Audio Trap TDM Channel 1/2 Status Port 1	
Audio TDM Chan Pair Phase Reve	rsal	Audio TDM Chan Pair Phase Reversal	
Audio TDM Chan Pair Mono		Audio TDM Chan Pair Mono	
Show Channel Pair for ALINK	Channel 1/2	Apply ALINK Channel 1/2 Settings to All	Apply
Audio Trap ALINK Channel 1/2 Enable Port		Audio Trap ALINK Channel 1/2 Status Port 1	
Audio ALINK Chan Pair Phase Rev	versal	Audio ALINK Chan Pair Phase Reversal	
Audio ALINK Chan Pair Mono		Audio ALINK Chan Pair Mono	
		ALINK PORT 2	
Show Channel Pair for TDM	Channel 1/2	Apply TDM Channel 1/2 Settings to All	Apply
Audio Trap TDM Channel 1/2 Enable Port 2		Audio Trap TDM Channel 1/2 Status Port 2	
Audio TDM Chan Pair Phase Reve	rsal	Audio TDM Chan Pair Phase Reversal	
Audio TDM Chan Pair Mono		Audio TDM Chan Pair Mono	
Show Channel Pair for ALINK	Channel 1/2	Apply ALINK Channel 1/2 Settings to All	Apply
Audio Trap ALINK Channel 1/2 Enable Port		Audio Trap ALINK Channel 1/2 Status Port 2	
Audio ALINK Chan Pair Phase Rev	versal	Audio ALINK Chan Pair Phase Reversal	
Audio ALINK Chan Pair Mono		Audio ALINK Chan Pair Mono	

Figure 6-16 : Redundancy Mode - VistaLINK® - Audio Channel Pair Faults

#### TDM Channels for Port 1 & Port 2

Show Audio Fault Channels: Allows the user to select which TDM channels to enable traps on.

Apply Button: The apply button applies the channel 1 settings to the rest of the TDM channels.

**Trap Enable: Phase Reversal:** Allows the user to enable traps to be sent out when a phase reversal fault is detected on the selected audio pair

**Trap Status: Phase Reversal:** Status monitor displays fault condition on the audio pairs. Green indicates no faults while red indicates a triggered fault condition

**Trap Enable: Mono:** Allows the user to enable traps to be sent out when a fault is detected on a mono channel on the selected audio pair.



**Trap Status: Mono:** Status monitor displays fault condition on the audio pairs. Green indicates no faults while red indicates a triggered fault condition.

#### A-Link Channels for Port 1 & Port 2

Show Audio Fault Channels: Allows the user to select which A-Link channels to enable traps on.

**Apply Button:** The apply button applies the channel 1 settings to the rest of the A-Link channels.

**Trap Enable: Phase Reversal:** Allows the user to enable traps to be sent out when a phase reversal fault is detected on the selected audio pair

**Trap Status: Phase Reversal:** Status monitor displays fault condition on the audio pairs. Green indicates no faults while red indicates a triggered fault condition

**Trap Enable: Mono:** Allows the user to enable traps to be sent out when a fault is detected on a mono channel on the selected audio pair.

**Trap Status: Mono:** Status monitor displays fault condition on the audio pairs. Green indicates no faults while red indicates a triggered fault condition.



# 7. UPDATING VLPRO SERVER JAR FILE

Products from Evertz are constantly evolving and new features are often added. It is therefore important to update the JAR files in use to provide access to all the latest features or enhancements. It will also necessary to add JAR files for new products. If your new product has not appeared even after waiting a few minutes for the Ethernet switch negotiation to complete then it is possible that your JAR file may be old or missing.

To perform a JAR update, ensure that all VLPro clients are closed (those clients which are not closed will automatically be disconnected as soon as the VLPro server is restarted). Maximize the VLPro Server window from the Windows task bar, select *Help*  $\rightarrow$ *Apply Update*  $\rightarrow$  *Product* from the menu

VistaLINK PRO Serv	/er	[22]	36.37 2007-0	
File Tools Help Status DBAdmin:	Activate L	icense	•g 🚑 Clients 🔊	Discovery
Database:	Apply Up	date	Product	Provideling
Logging System	About		2015-11-06	Description DBAdmin scan of Alarm log completed
Network:		12:00:00	2015-11-06	DBAdmin moved 0 alarm records to archives.
License	20	12:00:00	2015-11-06	Logger Running State set to buffer events
Evertzinternal-2020-09	-19	12:00:00	2015-11-06	DBAdmin created archive list of 0 items. Scan 1
S General Clients         12:00:00           5 Plus Clients         12:00:00           5 Web Clients         12:00:00           5 Web Clients         12:00:00           Licensed Features         12:00:00           Auto Response         12:00:00           Cause/Effect         12:00:00           MIB Parsing         12:00:00           SLA         12:00:00           Thumbnail         12:00:00           System Statistics         12:00:00           12:00:00         12:00:00		12:00:00	2015-11-06	Logger Running State set to buffer events
		12:00:00	2015-11-06	DBAdmin extracted records from alarm log. Building archive file. Scan 1 DBAdmin archiving is turned on so logs are being written to disk.
		12:00:00	2015-11-06	Logger Running State set to log events
		12:00:00	2015-11-06	Logger Running State set to buffer events DBAdmin scanning records from alarm log. Scan 1
		12:00:00	2015-11-06	DBAdmin initiating scan of Alarm log
		12:00:00	2015-11-06	Completed sending message "DBAdmin starting scan of logs. See VLProServer lo Sending message "DBAdmin starting scan of logs. See VLProServer log for details"
		12:00:00	2015-11-06	Completed sending message "DBAdmin initiated"
		12:00:00 12:00:00	2015-11-06 2015-11-06	Sending message "DBAdmin initiated" DBAdmin initiated
		00:00:01	2015-11-06	Completed sending message "DBAdmin completed"
				Details

Figure 7-1 : VistaLINK<sub>®</sub> PRO Server

A window will appear, as shown in Figure 7-2, simply navigate to the location of the new JAR file and select the file by double clicking. The window will automatically close and the update will be applied in the background.

#### 7800EMR-ALINK2 User Manual



VistaLINK PRO S	erver	-								X
File Tools He	əlp									
Status DBAdmin:	<u> </u>	Server Log	🔒 Clients 🔊	Discovery					15	
Database:	💆 Open									
E-mail System: Logging System: MVP Ack System:	Look In:	Documents			•	<b>1</b>	8			
Network:	A-Prod	ucts								
License Expires on 19-0 Evert2Internal-202 5 General Clients 5 Plus Clients - Third Party Devit 5 Web Clients Licensed Featur O Auto Respon: Cause/Effect	B-Impoi Datash Evertz My Sha Virtual	rtant Notes eets Forms pes Machines onal								
SLA	File Name:									
Thumbnail	Files of Type	e: jar directory, *.j	ar, *.zip					-	oServer lo	
Web Service System Star						0	pen	Cancel	g for details"	
		12:00:00	2015-11-06	DBAdmin initiated						
		00:00:01	2015-11-06	Completed sending	messade "D	DBAdmin co	mpleted"			
								Det	ails Cle	ar

Figure 7-2 : VistaLink<sub>®</sub> PRO – Applying JAR Updates

You will be prompted to restart the server to enable the change to take effect. Apply as many JAR updates as required before restarting the server.



Figure 7-3 : VistaLink<sub>®</sub> PRO – Restart You Alarm Server

By clicking Yes, server will automatically restart, but it is normal for the startup to take marginally longer while each individual update is being applied. Once complete, you may restart the VLPro Clients. As the clients restarts you will experience a short delay while the update is applied. A prompt will appear confirming that the updates have been applied.



# 8. UPGRADING THE FIRMWARE ON 7800EMR-ALINK2 THROUGH FTP

- 1. Identify and confirm the IP Addresses of the module and PC/laptop, and ensure that they are on same subnet.
- 2. Obtain the new firmware and copy to any directory on your computer. (C:\temp)
- 3. Open a DOS window by selecting **Start**  $\rightarrow$  **Run**, and typing "**cmd**" in the window that appears,

📼 Run	x
	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	cmd 👻
	This task will be created with administrative privileges.
	OK Cancel <u>B</u> rowse

Figure 8-1 : Run Window for FTP Access

- 4. In the DOS window type: *ftp xxx.xxx.xxx* (where the x's represent the module's IP Address)
- 5. Press <ENTER> when prompted for a "Username". And again when prompted for a "Password"
- 6. At the "**ftp>**" prompt, type "**hash**", toggles number sign (#) printing for each data block that is transferred.
- 7. At the "ftp>" prompt, type "put x.bin", where x represents the name of the firmware (.bin)



Note: If the firmware file is not local to where you are performing the FTP, then include the path with the name:

(eg: "put c:\temp\alink2\firmware.bin")

8. Once the upgrade is complete, send the command ""bye" to exit ftp connection (see Figure 8-2) and the module will reboot itself. Don't remove the module during this process or it could corrupt the firmware code.





Figure 8-2 : Sample FTP Upgrade Window