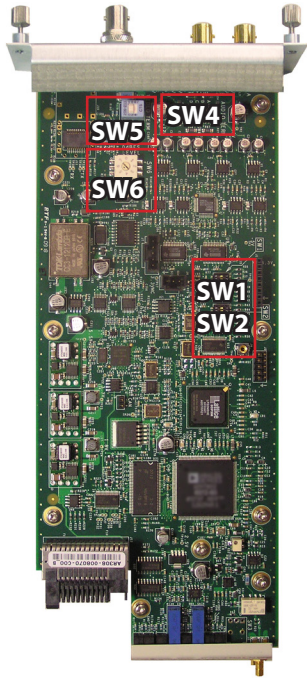


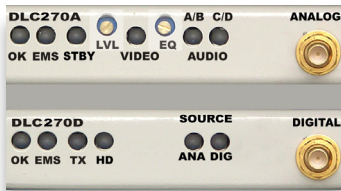
DL4000 VIDEO TRANSPORT SYSTEM MODULE

DLC270

Quick Start Guide



Front Panel Configuration Switches



- EQ** Video input cable length equalization
- LVL** Video input level adjustment
- EQ and LVL must be adjusted; see installation manual for more information**

Configuration Switch Functions

- SW1** Controls various video functions, such as the video characteristics (AGC, pedestal, standby signal type, and line rate) and the loss of video alarm
- SW2** Enables audio embedding and controls various audio characteristics (such as the destination group), the SFP alarm enable, 20 or 24-bit audio resolution, and enables the EMS override function
- SW4** Controls the termination of the analog audio input signals
- SW5** Controls the termination of the analog video input signal
- SW6 (Rotary switch)** Controls the peak analog audio level that the DLC270 can manage without clipping

Artel ships the DLC270 configured as follows:

- Artel ships the DLC270 with both the analog and digital inputs enabled
- **Default analog signal processing:**
 - Analog audio source with 600 ohm termination
 - Analog video source with 75 ohm termination
 - Automatic gain control enabled
 - Analog video pedestal enabled
 - 24-bit audio resolution, +20 dBm (600 ohms) peak audio level without clipping
 - Audio embed enabled into destination group #1
 - Analog video enabled through the BNC connector
 - SDI grey field, at the NTSC rate, enabled if no video is present
 - Audio mode set to 24 bits
 - Alarm disabled for no SFP present (alarm cannot be enabled)
 - Alarm disabled for no video present
 - EMS override enabled (the EMS can change the DLC270 configuration)
- **Default digital signal processing:**
 - Automatically relocks SD *270 Mb/s and HD (1.485 Gb/s, 1.485/1.01 Gb/s) and passes all other rates
 - Electrical SDI signals received on the Digital Video In BNC take precedence for processing as optical SDI output over any analog signals that the DLC270 receives and converts to electrical SDI
 - Optical transmit only

DIP Switch Configurations

SW1 CONFIGURATION			
	Function	Off	On
S1	Pedestal	Disabled	Enabled
S2	Video AGC	Disabled	Enabled
S3	Reserved	-	Must be On
S4	Reserved	-	Must be On
S5	Reserved	-	Must be On
S6	Standby Signal	Artel*	SDI-Grey
S7	SDI Standby	625 Line	525 Line
S8	Alarm on Loss of Video	Enabled	Disabled

*Non-video keep-alive signal
Factory Default: All On

SW2 CONFIGURATION			
	Function	Off	On
S1	Audio Embed	Disabled	Enabled
S2	Reserved	-	Must be On

S3	S4	Audio Destination
On	On	Group 1
Off	On	Group 2
On	Off	Group 3
Off	Off	Group 4

	Function	Off	On
S5	Audio Resolution	20-bit	24-bit
S6	Reserved	-	Must be On
S7	Reserved	-	Must be On
S8	EMS Override	Local Control	Remote Control

Factory Default: All On

SW4 CONFIGURATION ANALOG AUDIO TERMINATION			
	Function	Off	On
S1	Audio Ch A	High Z	600 ohm
S2	Reserved	-	Must be On
S3	Audio Ch B	High Z	600 ohm
S4	Reserved	-	Must be On
S5	Audio Ch C	High Z	600 ohm
S6	Reserved	-	Must be On
S7	Audio Ch D	High Z	600 ohm
S8	Reserved	-	Must be On

Factory Default: All On

SW5 CONFIGURATION ANALOG VIDEO TERMINATION			
	Function	Off	On
S5	Video Termination	High Z	75 ohm

Factory Default: On

SW6 CONFIGURATION ANALOG AUDIO TERMINATION	
POS	FUNCTION
0	+10 dBm
1	+12 dBm
2	+14 dBm
3	+16 dBm
4	+18 dBm
5	+20 dBm
6	+22 dBm
7	+24 dBm

Factory Default: +20 dBm



DLC270 Front Panel LEDs

DLC270A and DLC270D Common LEDs			
LED	Function	Color	Description
OK	DLC270 Module Status	OFF	If power is applied to the system, an internal fault with the DLC270AD may exist
		●	Normal operation
		●	If no other status LEDs indicate a minor alarm, then a temperature alarm is indicated
		●	Major alarm exists that requires immediate attention. TX status LED may provide fault information. If not, the alarm may be the result of an internal error
EMS	DL Manager System Status	OFF	The DLC270AD module is in local mode and its configuration is controlled by the onboard configuration switches
		●	The DLC270AD module is in remote mode and the configuration has been set by the EMS. When in remote mode, the actual configuration of the module will likely not match the settings of the configuration switches and changing the configuration switches will have no effect on the module operation

DLC270A			
LED	Function	Color	Description
STBY	Standby Signal Status	OFF	No standby signal is transmitted
		●	SDI or 143 non-video standby signal is being transmitted
Video	Video Signal Status	OFF	No video input is detected
		●	Video input detected
		●	Video overload
		●	Major alarm condition exists because DLC270 is unable to convert the analog video
Audio A/B	Audio Signal Status for A and B Channels	OFF	Embedding disabled (SW2, switch S1 is OFF)
		●	Normal operation; audio embedding enabled
		●	Embedding enabled and the audio peak is between -6 dBFS and -1 dBFS
		●	Embedding enabled and the audio peak is > -1 dBFS (overload)
Audio C/D	Audio Signal Status for C and D Channels	OFF	Embedding disabled (SW2, switch S1 is OFF)
		●	Normal operation; audio embedding enabled
		●	Embedding enabled and the audio peak is between -6 dBFS and -1 dBFS
		●	Embedding enabled and the audio peak is > -1 dBFS (overload)

DLC270D			
LED	Function	Color	Description
TX	Transmitter Status	●	Normal operation (analog or digital input signal detected or no input signal and the DLC270A is transmitting the SDI standby signal)
		* (flashing yellow)	SFP TX failure exists
		● (flashing green)	No analog or digital input signal and the DLC270A is transmitting the keepalive standby signal
		* (flashing yellow)	SFP TX failure exists
HD	Transmitter Rate	Off	270 Mb/s signal detected
		●	1.485 Gb/s or 1.485/1.001 Gb/s signal (uncompressed HD) detected
Source ANA	Analog Source Signal Status	Off	Digital video from the Digital Video In BNC is being transmitted
		●	Signal from the DLC270A is being transmitted
Source DIG	Digital Source Signal Status	Off	There is no digital video present on the Digital Video In BNC
		●	There is digital video present on the Digital Video In BNC and it is being transmitted out the SFP

* Flashing yellow | * Flashing green

Install SFP

