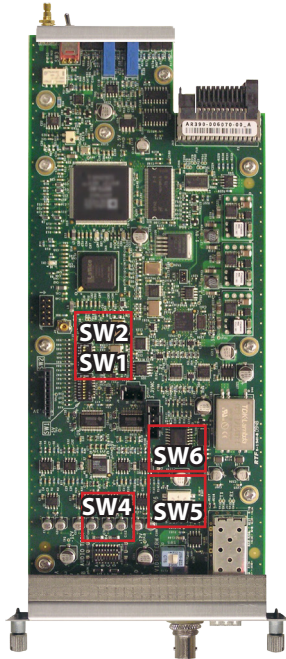# InfinityLink ILC170AD
Analog Video and 4 Ch Audio to SD-SDI

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 the EMS enable
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 ILC170AD can manage without clipping

Artel ships the ILC170AD configured as follows:

- 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 enabled for no SFP present
- Alarm disabled for no video present
- EMS override enabled (IL Manager can change the ILC170AD configuration)

■ DIP SWITCH CONFIGURATIONS

SW1 Configuration

	Function	Off	On
S1	*Pedestal on*	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	*SFP Alarms*	Disabled	*Enabled*
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

Install SFP
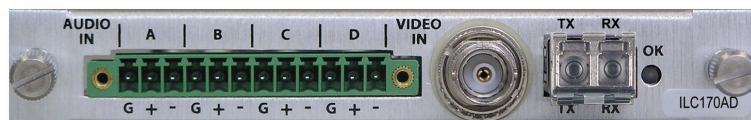
■ ILC170AD FRONT PANEL LEDS

LED	Function	Color	Description
OK	ILC170AD Module Status	OFF	If power is applied to the system, an internal fault with the ILC170AD may exist
		🟢 Green	Normal operation
		🟡 Yellow	If no other status LEDs indicate a minor alarm, then a temperature alarm is indicated
		🔴 Red	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	IL Manager System Status	OFF	The ILC170AD module is in local mode and its configuration is controlled by the onboard configuration switches
		🟢 Green	The ILC170AD module is in remote mode AND the configuration has been set by IL Manager. 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
TX	Transmitter Status	OFF	Transmitter is disabled. The ILC170AD is being used to feed another module through the chassis backplane
		🟢 Green	Normal operation (input signal present)
		🟡 Yellow	The ILC170AD cannot detect a video input signal and is transmitting the standby signal. Either an SDI grey screen or a non-video keep-alive signal is transmitted as the standby signal according to the setting of switches SW1: S6, S7
		✳ Red	No optical SFP is installed or an optical SFP TX fault exists
Video	Video Signal Status	OFF	No video input is detected
		🟢 Green	Video input detected
		🟡 Yellow	Video overload
		🔴 Red	Major alarm condition exists because ILC170AD 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)
		🟢 Green	Normal operation
		🟡 Yellow	Embedding enabled and the audio peak is between -6 dBFS and -1 dBFS
		🔴 Red	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)
		🟢 Green	Normal operation
		🟡 Yellow	Embedding enabled and the audio peak is between -6 dBFS and -1 dBFS
		🔴 Red	Embedding enabled and the audio peak is > -1 dBFS (overload)

✳ Flashing Red

Sales

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