



Mode Switch Functions

RX	Receiver Mode	
RPT	Repeater Mode (O to O)	
тх	Transmitter Mode	

Configuration Switch Functions

SW1	Controls the video rate and forced bypass function settings
SW2	Controls the input source (BNC IN or backplane connector) for transmitter mode and operation of the standby video pattern generator
SW3	Controls the following functions: SDI processing, ATSC to ASI video conversion, SFP alarms, optical reversion, video loss alarm, and EMS enable setting

DigiLink DLC300 - 3G-SDI Multi-Rate Digital Video Optical Transmitter/Receiver/Repeater

Artel ships the DLC300 configured as follows:

- Transmitter mode selected
- All signal types allowed
- Electrical input set to BNC
- Standby signal set to Artel non-video standby signal
- SDI Standby set to 525 line (SD-SDI), 59.94 fps (HD/3G)
- Forced bypass is disabled (when forced bypass is enabled, all signal classification, processing, and reclocking is bypassed)
- SDI processing set to No EG34 dithering
- ATSC to ASI conversion is disabled
- SFP alarms are enabled
- Optical reversion is disabled
- Video loss alarm is disabled
- EMS override is enabled (DigiLink Manager can change the DLC300 configuration)

DIP SWITCH CONFIGURATIONS

SW1 Configuration					
	Function	Off*	On		
S1	3G SDI	Disabled	Enabled		
S2	HD-SDI	Disabled	Enabled		
S3	SD-SDI	Disabled	Enabled		
S4	DVB ASI	Disabled	Enabled		
S5	ATSC	Disabled	Enabled		
S6	Reserved	-	Must be On		
S7	Reserved	-	Must be On		
S8	All Others	Disabled	Enabled		

*All SW1 Switches off for bypass mode Factory Default: All On

SW2 Configuration

S1	S2	S 3	Video Source	
On	On	On	BNC In	
Off	Off	Off	Backplane 1	
Off	On	Off	Backplane 2	
Off	Off	On	Backplane 3	
Off	On	On	Backplane 4	
On	Off	Off	Reserved	
On	Off	On	Reserved	
On	On	Off	Reserved	
Factory Default: All On				

S4	S 5	Standby '	Standby Type	
On	On	ARTEL*		
Off	On	3G 1080p		
On	Off	SD-SDI	SDI	
Off	Off	HD 1080i	Uley	
*Non-video keep-alive signal				

e	S1	Reserved	-	Must be On
	S2	EG34 Dither	Enabled	Disabled
	S3	ATSC-ASI Conversion	Enabled	Disabled
	C/	Posorvad		Must be On

Function

Standby

Format

Reserved

Reserved

Factory Default: All On

SW3 Configuration

Function

S6

S7

S8

Off

625 Line

(SD-SDI)

(HD/3G)

Off

50fps

-

On

525 Line

(SD-SDI)

59.94fps

(HD/3G) Must be On

Must be On

On

Control

S3	Conversion	Enabled	Disabled
S4	Reserved	-	Must be On
S5	SFP Alarm	Disabled	Enabled
S6	Optical Reversion	Enabled	Disabled
S7	Alarm On Loss of Video	Enabled	Disabled
	FMS	Local	Remote

S8 **Override** Control

Factory Default: All On





■ DLC300 FRONT PANEL LEDS

LED	Function	Color	Description				
		OFF	F If power is applied to the system, an internal fault may exist				
DLC300 OK Module Status	DLC300	Green	Normal operation				
	Module	Yellow	A temperature alarm is indicated if the RX LED is not flashing yellow				
	Red	The TX or RX LEDs may indicate the cause of the alarm. Loss of video if the video alarm is enabled.					
		- Accu	Video rate is not locked. 1 The corresponding signal rate LED w	Video rate is not locked. 1 The corresponding signal rate LED will flash red. Possible internal error			
	DigiLink Manager EMS System Status	OFF	switches				
EMS		Green	The DLC300 module is in remote mode and the configuration has been set by DigiLink 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's operation				
		OFF	Receiver mode is selected or the corresponding PRIMARY or SECONDARY SFP is not installed				
TVO	Transmitter	Green	Normal TX operation (input signal present)				
TXZ	(PRI & SEC)	Yellow	Standby operation (signal from the standby generator)				
		* Red	No SFP is installed in either socket or an SFP TX failure exists	No SFP is installed in either socket or an SFP TX failure exists			
		OFF	Transmitter mode is selected or the corresponding PRIMARY o	r SECONDARY SFP is not installed			
		Green	Normal RX operation (input signal is present)				
RX2	Receiver Status	Yellow	143 Mb PRBS non-video standby signal detected				
1012	(PRI & SEC)	* Yellow	Receive optical power is high				
		* Red	Low light, loss of SFP RX signal, the PRIMARY and SECONDARY SFP sockets are both missing SFPs, or an SFP RX failure exists				
		OFF	3G signal is not detected				
	2.07Ch/c	Green	3G signal is received or transmitted	Footnotes			
3G	Status	Yellow	3G signal is detected and is processed3 w/EG34 dithering	indicates that the input signal rate is			
	otatus	Red	3G signal is detected and blocked	outside the standard rate requirements. The input signal rate requirements are as			
		* Red	Video rate is unlocked1	follows:			
	1 405 Ch/2 CDI	OFF	HD signal is not detected	- HD SDI rate must be 1.485 Mb/s or			
	1.485 GD/S SDI Signal	Green	HD signal is received or transmitted	- 3G SDI rate must be 2.97 Gb/s or 2.97/1.001			
HD	Status	Yellow	HD signal is detected and is processed3 w/EG34 dithering	Gb/s ± 50 ppm If the signal cannot be held within these			
		Red	HD signal is detected and blocked	requirements, try setting the DLC300 to			
		* Red	Video rate unlocked1	2. When the DLC300 is in repeater mode, the			
		OFF	SD signal is not detected	TX and RX status LEDs are active to represent the simultaneous receive and transmit			
	270 Mb/s SDI	Green	SD signal is received or transmitted	operations occurring 3. Depending on the operating mode of the			
SD	Signal	Yellow	SD signal is detected and is processed3 w/EG34 dithering	DLC300, it processes the signal as follows:			
	Status	Red	SD signal is detected and blocked	- Receiver mode—Undithered			
		* Red	Video rate unlocked1	 Repeater mode— The optical transmit signal is an unmodified (but reclocked) 			
		OFF	ASI signal is not detected	copy of the optical receive signal. The electrical BNC output and monitor output			
ASI	ASI	Green	ASI signal is being received or transmitted	is undithered if SW3-2 is OFF, otherwise these			
	Signal	Yellow	ASI signal is detected and is processed3 w/EG34 dithering	(The optical transmit signal is an unmodified			
	Status	Red	ASI signal is detected and blocked	copy of optical receive signal). If a DLC300 in receiver mode is set to undither and an			
		* Red	Video rate unlocked1	undithered SDI or ASI signal is received, the signal will be output normally, without			
	SMPTE 310	OFF	SMPTE 310 19.39 Mb/s ATSC signal is not detected	dithering.			
ATSC	19.39 Mb/s ATSC	Green	SMPTE 310 19.39 Mb/s ATSC signal is received or transmitted				
	Signal Status	Yellow	SMPTE 310 19.39 Mb/s ATSC signal is detected and is being cor	iverted to ASI			
5		🔴 Red	SMPTE 310 19.39 Mb/s ATSC signal is detected and blocked				

Flashing yellow | * Flashing red

Install SFPs



Optical redundancy is enabled with installation of secondary SFP (as shown)

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Sales



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