DigiLink DLC100 - Optical Transmitter, Receiver, Transceiver, or Repeater for HD-SDI, SD-SDI, SDTI, DVB-ASI, and ATSC

Artel ships the DLC100 configured as follows:

- Transceiver mode selected
- All signal types allowed
- Electrical input set to BNC
- EMS override is enabled (EMS can change the DLC100 configuration)

Mode Switch Configurations

Mode   SW1

Setting	DLC100 Module	Electrical Signal		Optical Signal	
		IN	OUT	RX	TX
RECEIVE	Receives optical signals only. The SFP laser used to transmit signals is turned off and the transmit alarms are disabled.		X	X	
TRANSMIT	Transmits signals only. The SFP receiver is disabled and the receive alarms are disabled.	X			X
TRANSCEIVE	Receives and transmits signals. The SFP laser and receiver are enabled as are the associated alarms.	X	X	X	X
REPEATER	Reclocks the received optical signal and transmits the signal back out. The optical receive signal is also available on the electrical outputs.		X	X	X

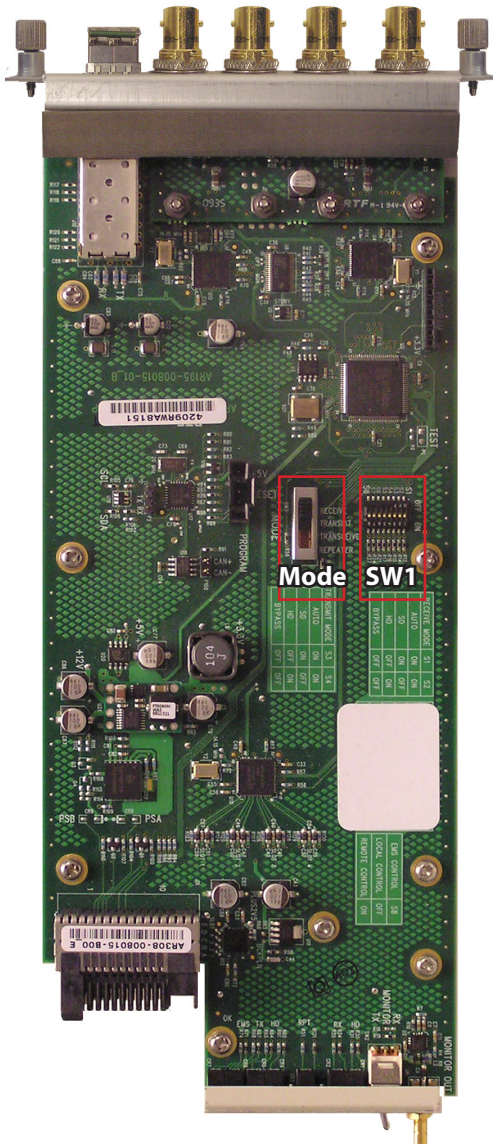*Factory Default: Transceive*

DIP Switch Configurations

SW1 Configuration		
S1	**S2**	**Receive Mode**
On	*On*	*Auto*
On	Off	SD
Off	On	HD
Off	Off	Bypass

S3	**S4**	**Transmit Mode**
On	*On*	*Auto*
On	Off	SD
Off	On	HD
Off	Off	Bypass

S5	**S6**	**S7**	**Input 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

	Function	**Off**	**On**
S8	*EMS Override*	Local Control	*Remote Control*

Factory Default: All On

Install SFP

LED	Function	Color	Description
OK	DLC100 Module Status	OFF	If power is applied to the system, an internal fault with the DLC100 may exist
		🟢 Green	Normal operation
		🟡 Yellow	If the RX LED is not flashing yellow, then a temperature alarm is indicated
		🔴 Red	The TX or RX LEDs may indicate the cause of the alarm or the alarm condition can indicate an internal error
EMS	DigiLink Manager System Status	OFF	The DLC100 module is in local mode and its configuration is controlled by the onboard configuration switches
		🟢 Green	The DLC100 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's operation
TX	Transmitter Status	OFF	Transmitter is disabled. The DLC100 is in receiver-only operating mode
		🟢 Green	Normal operation (input signal is present)
		✳Green	No SFP is installed (RX and TX LEDs are both flashing) or an SFP TX failure exists
		🟡 Yellow	The DLC100 cannot detect an input signal and is transmitting the standby signal
		✳ Yellow	No SFP is installed (RX and TX LEDs are both flashing) or an optical SFP TX failure exists. Also, the DLC100 cannot detect an input signal and is transmitting the standby signal
		🔴 Red	The DLC100 detects an incorrect input signal type. For example, you have the DLC100 configured to receive 270 Mb/s signal rates only, but another signal rate is received
		✳ Red	No SFP is installed (RX and TX LEDs are both flashing) or an SFP TX failure exists. Also, the DLC100 detects an incorrect input signal rate. For example, you have the DLC100 configured to receive 270 Mb/s signal rates only, but another signal rate is received
HD	Transmitter Rate Status	OFF	270 Mb/s signal
		🟢 Green	1.485 Gb/s or 1.485/1.001 Gb/s signal (uncompressed HD)
		🟡 Yellow	19.39 Mb/s signal detected (ATSC HD or other signal rate)
RPTR	Repeater Mode Status	OFF	Repeater mode disabled
		🟢 Green	Repeater mode enabled (optical output = optical input)
RX	Receiver Mode Status	OFF	Receiver is disabled. The DLC100 is in transmit-only operating mode
		🟢 Green	Normal operation (receiver signal is present)
		🟡 Yellow	Standby signal is being received from the transmitter
		✳ Yellow	Receive optical power is high
		🔴 Red	The DLC100 detects an incorrect input signal type. For example, you have the DLC100 configured to receive 270 Mb/s signal rates only, but another signal rate is received
		✳ Red	No SFP is installed (RX and TX LEDs are both flashing), a low receiver power condition exists, or an SFP RX failure exists
HD	Receiver Rate	OFF	270 Mb/s signal
		🟢 Green	1.485 Gb/s or 1.485/1.001 Gb/s signal (uncompressed HD)
		🟡 Yellow	19.39 Mb/s signal (ATSC HD) or other signal rate

✳Flashing green | ✳Flashing yellow |✳ Flashing red