

Overview

The VILINK ML4D is a Fiber Optic Digital Multiplexer for transmitting 4 channels of video, 4 channels of stereo audio, and/or 4 channels of data over a fiber optic cable. The ML4 has the ability to encode these signals, multiplex, and transmit bi-directionally over one singlemode fiber optic cable. This robust transmission platform additionally offers a full (NMS) monitoring capability at each node.

The ML4D Series is compatible with NTSC, PAL and CCIR video, 20 bit stereo audio, and standard data interfaces such as RS-232 and RS-422. Long transmission distances up to 50 kilometers are easily accommodated because each node becomes a repeater point for the digital signal, allowing for vast overall transmission considerations.

The ML4D series use of uncompressed analog to digital modulation techniques provides for adjustment free operation over a wide dynamic range. Digital signaling offers superior receiver output stability, which is unaffected by changes in fiber path attenuation due to aging or splicing points.

The ML4D series may be further maintained with the optional VILINK Plus+ (NMS) Network Management & (GUI) Interface Software Package. This permits any users the ability of monitoring the entire system for status alarms, such as loss of signal or optical signal, on any one of the system channels.

Applications for the ML Series include video conferencing, long haul CCTV, campus fiber networks, traffic surveillance, homeland security, SCADA systems, and military applications.



ML4D
Video/Audio/Bi-Directional Data

Features

- Multiplex Video, Audio, and Data
- Compatible with NTSC, RS-170, RS-250C, PAL, and CCIR Video-Formats
- Adjustment Free Uncompressed Digital Transmission up to 50 Km
- 24 Bit Digital Encoded Stereo Audio
- 100% Protocol Independent I/O
- NMS (GUI) Monitor Package (Option)
- TCP/IP and SNMP Software Package Option

Applications

- ITS Traffic Applications
- Long Distance CCTV/PTZ
- Homeland Security
- Transportation, Port and Harbor Security
- Utility System
- Military Security and Surveillance Applications
- Campus Security
- Premise Networks
- Any High Quality Video Requirement

Ordering Information

Model	Description
ML4DVA03	4-Channel Video, Stereo Audio Transmitter, 1310nm SM, ST.
ML4DVAR03	4-Channel Video, Stereo Audio Receiver, 1310nm SM, ST.
ML4DVA03/5	4-Channel Bi-directional Video, Stereo Audio and RS-232 1310/1550nm SM, ST.

Specifications

System:	
Error Rate	1 in 10 ⁹ or Better
NMS (Option)	GUI RS-232 ports
Indicators	PWR, LINK
NMS Connector	RJ-12
Environment	
Operating	-34°C to 74°C
Storage	-40°C to 95°C
Humidity	95% Non-Condensing
Electrical	
Interface	EIA RS-232/RS-422 Switchable
Connector	Female DB-25
Video	
Channels	4
Format	NTSC, RS-250C, PAL, CCIR
Signal Level	1 Vp-p
Video Digitization	8 bits, 13 Mega Samples
Bandwidth	6.5 MHz
Differential Gain/Phase	<2 % / <1.3°
SNR	> 60 dB (weighted)
Connector	BNC

Optical:	
Transmitter	Laser 1310/1550nm
Receiver	PIN
Power Budget	25 dB SM
Connectors	ST, FC, SC
Data:	
Data Rate	19.2 Kbps
Format	RS-232, RS-422
Connector	RJ-45
Audio:	
Channels	4 Stereo, 8 Mono
No. of Bits	20 Bits per channel
Sampling Rate	13 Megabit
Total Harmonic Distortion	0.01% @ 0dB
Signal-to-Noise Ratio	> 92dB
Bandwidth	20Hz to 20KHz
Physical:	
Transmitter/Receiver	19" x 1.75" x 10"
Weight	
Power:	
AC Supply Voltage	90-240 VAC / 47-63 Hz

Application

