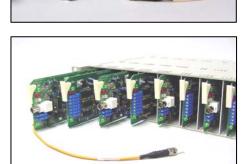
# DVM-2000 & DVM-2200 1 Ch 12 Bit Video, 6 Ch 24 Bit Audio & 3 Ch Data Fiber Optic **Multiplexer**



- Supports 1 video, 6 audio and 3 RS-232 simplex data channels
- All digital processing exceeds RS-250C Short Haul specifications.
- Video bandwidth 8 MHz with 75dB S/N; audio 20Hz to 20KHz with 90dB S/N.
- Video gain and 1000 ft cable equalization adjustments for input &
- Transport Analog Video & Audio or SDI up to 540 Mbit/sec with Automatic Switch-over on the same fiber (Option for DVM-2200 only).
- Singlemode or multimode configurations.
- 12 Bit Video with a Signal to Noise ratio greater than 75 dB and a Signal to Quantizing Noise ratio of 74 dB.
- Differential Gain and Phase of 0.2% and 0.2°, respectively.
- Video, Audio and Optical front panel status indicators with dry alarm relay contacts.
- Available in portable, rack-mount and modular configurations with all optical wavelengths, LED Multimode and Laser Single-mode.
- Support analog video, analog audio, serial digital video and digital audio in the same tray.



......110 or 220VAC (opt 48VDC)

### **DESCRIPTION**

The DVM-2000 series is designed for applications that demand high quality video (12 bit), audio (24 bit) and data transmission over fiber. Applications include links from studio to transmitter (STL), studio to studio, studio to CATV head-end, common carrier, RBOC Telco circuits, distance learning, Intelligent Transportation Systems & back-haul feeds from special events. This series supports NTSC, PAL, SECAM as well as video with diplexed audio carriers at 4.5MHz, 5.8 MHz and 6.4 MHz (Option for 10 MHz). The design features differential video and audio inputs that greatly reduce hum and noise.

The DVM-2000 is a compact unit designed for stand alone, wall mount or rack-mount applications, while the DVM-2200 modular card plugs into one of our UTIL-200-DVM series card trays for high density rack mounting. The DVM-2200 with -SDI IN and -SDI OUT options supports analog video and audio or SDI with embedded audio. The analog video and audio do not operate while in the SDI mode. The UTIL-200-DVM card tray can also accommodate cards for other formats such as SDI, analog/AES digital audio and reclocking for maximum flexibility. Advanced CWDM technology is available which enables up to 8 units to be put on one strand of

## **SPECIFICATIONS**

<u>Video Performance:</u>		Audio Performance:	
Signal to noise	> 75 dB	Signal to noise	> 90 dB
Differential gain	< +/- 0.2 %	Frequency response to 20 Hz to 20 KHz	< +/- 0.1 dB
Differential phase	< +/- 0.2 °	Distortion	
Chrominance to luminance gain	< +/- 0.5%	Audio output level, adjustable	Unity, +/- 6 dBm
Chrominance to luminance delay	< +/- 5 nsec.	Maximum input & output level, 600 Ohm	+18 dBm
Frequency response to 6 MHz	< +/- 0.05 dB	Audio output impedance, balanced	50 Ohms
3 dB Bandwidth	8 MHz	Audio input impedance, balanced (selectable)	
Luminance non-linearity	< 0.2 %	Power dissipation	< 15 Watts, per unit
Ringing	< +/- 0.5 %	AC operation	110 or 220VAC (opt 48
Tilt		Operating temperature	0 to +50 °C
Video output & input impedance		Storage temperature	40 to +95 °C
Delay, throughput		Portable and Wall-mount:	7" L x 5 ¾" W x 1 ¾" H
Data channels	3 RS-232C@ 9600 Baud	Triple Rack-mount Kit for 3 modules:	7" L x 19" W x 1 ¾" H



# In the USA and Canada call 1-(800)-4TV-TEST

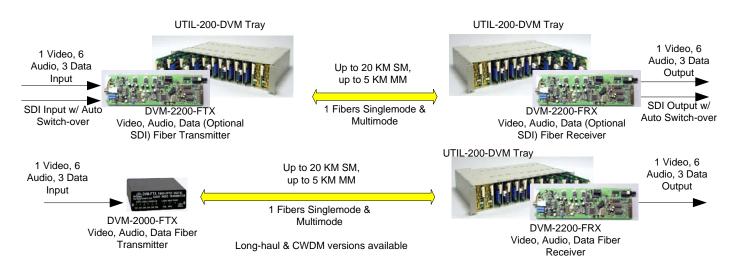
191 Forest Avenue, Locust Valley, NY 11560-2132 USA 1-(800)-488-8378, (516)-671-7278, FAX (516)-671-3362

> E-Mail: sales@multidyne.com Web Site: www.multidyne.com

# **ORDERING INFORMATION:**

	Fiber Optics, Broadcast Multiplexers, 12 Bit Video, 24 Bit Audio and Data, Stand-alone, Multimode: (SIN 58-6)	
DVM-2000-FTX-2	12 bit Video, 6 Channels of 24 bit Audio and 3 Channels of RS232 Data, Fiber Optic Transmitter; exceeds RS-250C Short-haul specs. with 1310nm Multimode	
	LED -14 dBm with ST connector. (May require -DVMAUDIO20, -DVMXLR20, -RMT, -BLANK and -WALL)	
DVM-2000-FRX-2	12 bit Video, 6 Channels of 24 bit Audio and 3 Channels of RS232 Data, Fiber Optic Receiver; exceeds RS-250C Short-haul specs, Multimode PIN with ST	
	connectors, Sensitivity -24 dBm. (May require –DVMAUDIO20, -DVMXLR20, -RMT, -BLANK and -WALL)	
	Fiber Optics, Broadcast Multiplexers, 12 Bit Video, 24 Bit Audio and Data, Stand-alone, Singlemode: (SIN 58-6)	
DVM-2000-FTX-50	12 bit Video, 6 Channels of 24 bit Audio and 3 Channels of RS232 Data, Fiber Optic Transmitter; exceeds RS-250C Short-haul specs. with 1310nm Single-mode Laser -8 dBm with FC connector. (May require -DVMAUDIO20, -DVMXLR20, -RMT, -BLANK and -WALL)	
DVM-2000-FTX-52	12 bit Video, 6 Channels of 24 bit Audio and 3 Channels of RS232 Data, Fiber Optic Transmitter; exceeds RS-250C Short-haul specs with 1310nm Single-mode Laser -3 dBm with FC connector (May require -DVMAUDIO20, -DVMXLR20, -RMT, -BLANK and -WALL)	
DVM-2000-FTX-53	12 bit Video, 6 Channels of 24 bit Audio and 3 Channels of RS232 Data, Fiber Optic Transmitter; exceeds RS-250C Short-haul specs with 1310nm Single-mode Laser +0 dBm with FC connector (May require -DVMAUDIO20, -DVMXLR20, -RMT, -BLANK and -WALL)	
DVM-2000-FTX-6	12 bit Video, 6 Channels of 24 bit Audio and 3 Channels of RS232 Data, Fiber Optic Transmitter; exceeds RS-250C Short-haul specs with 1550nm Single-	
	mode Laser +0 dBm with FC connector (May require -DVMAUDIO20, -DVMXLR20, -RMT, -BLANK and -WALL)	
DVM-2000-FTX-7-xxxx	12 bit Video, 6 Channels of 24 bit Audio and 3 Channels of RS232 Data, Fiber Optic Transmitter; exceeds RS-250C Short-haul specs with CWDM 1270, 1290, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590 or 1610nm Single-mode Laser –0 dBm with SC connector. Supports up to 8 wavelengths or channels per fiber optic cable. (Enter wavelength for xxxxx) (May require -DVMAUDIO20, -DVMXLR20, -RMT, -BLANK and -	
	WALL) (May requires CWDM Mux & Demux Accessories)	
DVM-2000-FRX-50	12 bit Video, 6 Channels of 24 bit Audio and 3 Channels of RS232 Data, Fiber Optic Receiver; exceeds RS-250C Short-haul specs, Singlemode PIN with FC connectors, Sensitivity -28 dBm. (May require -DVMAUDIO20, -DVMXLR20, -RMT, -BLANK and -WALL)	
	Accessories (SIN 58-6)	
-RMT	Triple Rack-mount Kit (1 kit)	
-BLANK	Blank panel for rack-mounting kit	
-WALL	Wall-mount Kit (1 set )	
-DVMAUDIO20	Audio screw terminal break-out adapter for DVM2000	
-DVMXLR20	XLR Audio Adapter Cable for DVM2000	
-NOAUDIO	No Audio Option, price adjustment for units without the 6 audio channels (subtract \$200 per transmitter or receiver)	
	Fiber Optics, Broadcast Multiplexers, 12 Bit Video, 24 Bit Audio and Data, Modular, Multimode: (SIN 58-6)	
DVM-2200-FTX-2	Modular, 12 bit Video, 6 Channels of 24 bit Audio and 3 Channels of RS232 Data, Fiber Optic Transmitter; exceeds RS-250C Short-haul specs. with 1310nm Multimode LED -14 dBm with ST connector for the UTIL-200-DVM Tray. (Optional -DVMAUDIO22, -DVMXLR22, -SDI IN and -SDI OUT)	
DVM-2200-FRX-2	Modular, 12 bit Video, 6 Channels of 24 bit Audio and 3 Channels of RS232 Data, Fiber Optic Receiver; exceeds RS-250C Short-haul specs, Multimode PIN with ST connectors, Sensitivity -24 dBm for the UTIL-200-DVM Tray. (Optional -DVMAUDIO22, -DVMXLR22, -SDI IN and -SDI OUT)	
	Fiber Optics, Broadcast Multiplexers, 12 Bit Video, 24 Bit Audio and Data, Modular, Singlemode:	
DVM-2200-FTX-50	Modular, 12 bit Video, 6 Channels of 24 bit Audio and 3 Channels of RS232 Data, Fiber Optic Transmitter; exceeds RS-250C Short-haul specs. with 1310nm Single-mode Laser -8 dBm with FC connector for the UTIL-200-DVM Tray. (Optional -DVMAUDIO22, -DVMXLR22, -SDI IN and -SDI OUT)	
DVM-2200-FTX-52	Modular, 12 bit Video, 6 Channels of 24 bit Audio and 3 Channels of RS232 Data, Fiber Optic Transmitter; exceeds RS-250C Short-haul specs. with 1310nm Single-mode Laser -3 dBm with FC connector (Optional -DVMAUDIO22, -DVMXLR22, -SDI IN and -SDI OUT)	
DVM-2200-FTX-53	Modular, 12 bit Video, 6 Channels of 24 bit Audio and 3 Channels of RS232 Data, Fiber Optic Transmitter; exceeds RS-250C Short-haul specs. with 1310nm Single-mode Laser +0 dBm with FC connector (Optional -DVMAUDIO22, -DVMXLR22, -SDI IN and -SDI OUT)	
DVM-2200-FTX-6	Modular, 12 bit Video, 6 Channels of 24 bit Audio and 3 Channels of RS322 Data, Fiber Optic Transmitter; exceeds RS-250C Short-haul specs. with 1550nm Single-mode Laser +0 dBm with FC connector (Optional -DVMAUDIO22, -DVMXLR22, WDM-95, -SDI IN and -SDI OUT)	
DVM-2200-FTX-7-xxxx	Modular, 12 bit Video, 6 Channels of 24 bit Audio and 3 Channels of RS232 Data, Fiber Optic Transmitter; exceeds RS-250C Short-haul specs with CWDM 1270, 1290, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590 or 1610nm Single-mode Laser 0 dBm with SC	
	connector. Supports up to 8 wavelengths or channels per fiber optic cable. (Enter wavelength for xxxx) (Optional -DVMAUDIO22, -DVMXLR22, -SDI IN and -SDI OUT) (May requires CWDM Mux & Demux Accessories)	
DVM-2200-FRX-50	Modular, 12 bit Video, 6 Channels of 24 bit Audio and 3 Channels of RS232 Data, Fiber Optic Receiver; exceeds RS-250C Short-haul specs, Singlemode PIN with FC connectors, Sensitivity -25 dBm for the UTIL-200-DVM Tray. (Optional -DVMAUDIO22, -DVMXLR22, -SDI IN and -SDI OUT)	
-SDI IN	Serial Digital Video input for DVM-2200-FTX Transmitter with auto switch-over from analog video to SDI when present (optional).	
-SDI OUT	Serial Digital Video output for DVM-2200-FRX Receiver with auto switch-over from analog video to SDI when present (optional).	
	Modular Utility Travs and Power Supplies & Accessories (SIN 58-6)	
UTIL-200-DVM-2RU-AC	Analog, Digital and Fiber, up to 10 Slots, 2RU, Modular Utility Tray, with one 85-265 VAC Power Supply & Line Cord. Supports the DVM-2200 & DTV-220/230	
5 250 DVIII 2110 710	SDI cards.	
PS-200-DVM-AC	Modular 85-265 VAC Power Supply & Line Cord for 200 series travs	
-DVMAUDIO22	Nicution 30-250 VAC Flower Supply & Line Cold for 200 series trays  Audio screw terminal break-out adapter for DVM2200	
-DVMXLR22	Audio Salew lefinina orear-out adapter in DVwi2200  XLR Audio Adapter Cable for DVW2200  XLR Audio Adapter Cable for DVW2200	
- P & IAIVEI/55	ALIX Addition Adapter Cable 101 DVIVIZZOU	

#### Application Diagram for DVM2000 & DVM2200 Video, Audio & Data Fiber Optic Transport System





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