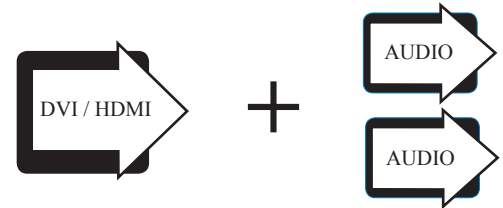


1 Channel DVI / HDMI & 2 Channels Analog Audio Fiber Optic Transmitter / Receiver Modules



FEATURES:

- Digital transmission of DVI / HDMI & 2 channels of audio over one multimode or singlemode fiber
- Supports HDMI with HDCP
- 24-bit stereo audio channel, 47KOhm unbalanced
- Audio frequency response – 20Hz to 20KHz (-1dB)
- Uses all-digital processing and transmission for crystal-clear signals and no color skewing
- Real-time video transmission for exceptional quality & resolution – no video compression
- Auto detects and switches resolution & sync configurations
- Requires no adjustments, equalization or de-skewing during setup
- Supports transmitted DDC & HDCP over same fiber
- Standard DVI-D video connector
- Standard 1/8" stereo headphone jack

DESCRIPTION:

Meridian's MT/MR-1DV2A-x is a state-of-the-art, cost-effective, high performance video & audio transmission system. These modules transmit one channel of fully-compliant DVI and one stereo channel of high quality analog audio over one multimode or singlemode fiber. Because it transmits signals in real-time, there is no loss of video quality or audio fidelity with no latency issues. These units represent a perfect solution for transporting dynamic video signals with crystal clear video with no color pixel skewing. This link also includes an optical back channel on the same fiber for DDC/HDCP communications. Included in this unit is the ability to do onboard conversion from DVI and analog audio to HDMI with embedded audio. Also, for switching and routing applications, the DDC back channel can be disabled while using local EDID information for obtaining proper resolution settings.

CONFIGURATIONS:

These MT/MR-1DV2A-x modules are available in standard shelf/wall mount configurations. See the ST/SR-1DV2A-x data sheet for the 1-slot card configurations.

MARKETS:

- ✓ Courtrooms
- ✓ Medical & MRI displays
- ✓ Air traffic control
- ✓ Military & Gov't information displays
- ✓ Concert & sporting event displays
- ✓ Video/audio walls
- ✓ CAD/CAM
- ✓ Digital signage
- ✓ DVI switching & routing
- ✓ Video Conferencing
- ✓ Professional home theatre

SPECIFICATIONS:

Video

Number of Video Channels	1 DVI Video w/DDC or HDMI w/HDCP
Horizontal Scan Rate	30kHz to 130kHz (auto sensing)
Vertical Scan Rate	60-85Hz (auto sensing)
Resolution Range.....	640x480 to 1920x1080, 720p, 1080p
Input Impedance/Level	50Ω / 500mV p-p, H&V 3Vp-p

Audio

Number of Audio channels.....	2 Channels
Audio channel.....	Analog (DVI mode), Embedded Digital (HDMI mode)
Audio encoding.....	24-bit
Audio level	2V p-p, max.
Frequency response	20Hz to 20KHz (-1dB)
SNR.....	>85dB
THD	<0.02% @ 1KHz

Optical

Number of fibers	1
Fiber type	Singlemode or Multimode
Optical Budget	10 dB
Data rate	4.25Gbps

Power *

Module	5VDC, 700 mA
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* Power shown @ max value

Connectors

Video	DVI-D (female)
Audio	1/8" Stereo Jack
Optical	Options for SC, ST, FC, LC
Power (modules).....	5.5mm x 2.1mm

Indicators (LEDs)

Power	Power Present - Red (OK)
Link	Link Present - Green (OK)
Video	Video signal present - Green (OK)
Audio	Audio signal present - Green (OK)

Physical

Dimensions (Module) ...	24 mm (0.95") H, 107 mm (4.21") W, 125 mm (4.92") L
Weight (Module)	182 gms (6.4 Oz)

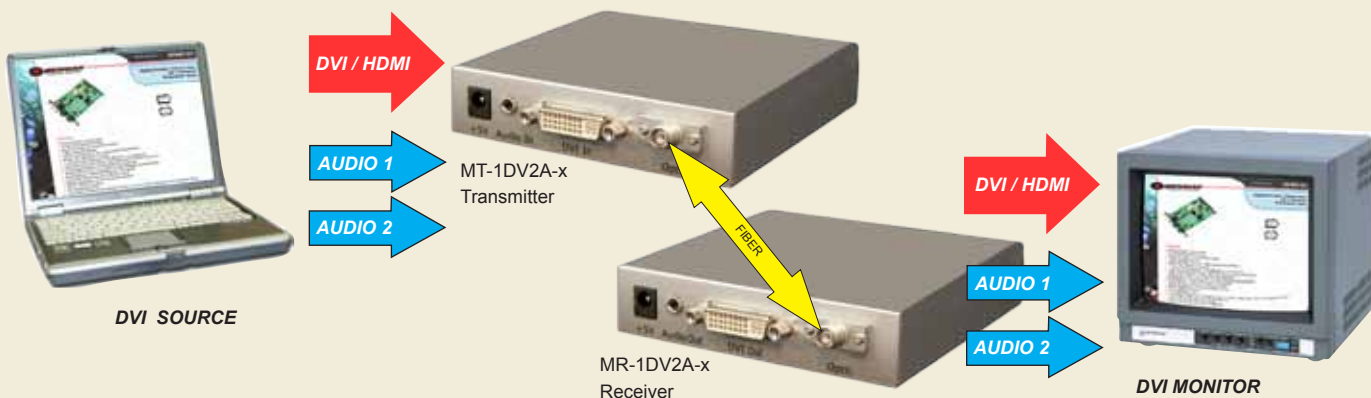
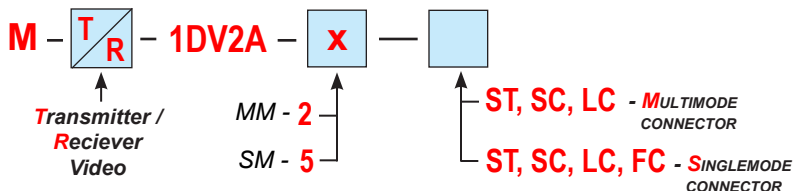
Enviromental

Operating Temperature ..	-10°C to +50°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Quality

MTBF	>100,000 hours @ Ground Fix 35°C per MIL217F
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PART NUMBERS:



OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Multimode (FP Laser) 62.5 / 125	-6	-16	10	1300 / 850	ST, SC, LC	16
Singlemode (FP Laser) 9 / 125	-6	-16	10	1310 / 1550	ST, SC, LC, FC	16