



DigiViewTM Video Link



MT/MR-1DM-x

HDMI Optical Transceiver

User Manual

FEATURES

- Supports HDMI Video up to 4Kx2Kx30 Resolution
- HDMI 1.4a with HDCP Support
- DDC CEC HPD Signal Support
- No Settings or Adjustments Necessary, Automatically Recognizes HDCP, EDID & CEC
- Supports up to 300m Transmission Distance with OM3 multimode fiber
- Standard HDMI Connector
- Integrated USB Connector for Power
- Double Power Supply (HDMI 5V&USB)
- Hot-Pluggable
- EMI/RFI Resistant
- 850nm VCSEL and PIN Photodetector
- Uses Small, Reliable LC Optical Connector
- Operating Case Temperature: ~74°C

DESCRIPTION

The Meridian **MT/MR-1DM-x** HDMI optical transmitter and receiver are designed to send 1 channel of 1.4a compliant HDMI Video with embedded audio over two optical fibers.

HDCP is automatically supported for the transmission of content-protected video.

Link can operate over single fiber in DVI mode when the HDCP compliance is not required.

The 4K HDMI optical transceiver supports transmission of an uncompressed lossless HDMI 1.4a signal over multimode optical fiber at 850nm, for distances up to 300 meters, at a resolution of 4Kx2K.

Transmitter converts an HDMI signal to a single 10Gb/s serial data stream for transmission over two optical fibers. **Receiver** converts the serial data back to an HDMI signal.

This product is ideal for large-screen displays, conferencing systems and home entertainment.

This fiber link meets all of the standards of interference immunity, to ensure the stability of the signal.

The transceivers are RoHS compliant and lead-free. These small modules utilize one multimode fiber with a standard locking LC optical connector.

Operating on 5V DC power over a standard micro-USB connector, these modules are ready for easy installation and operation.

Package Includes

- MT-1DM-x TX (Transmitter, To Video Source)
- MR-1DM-x RX (Receiver, To TV)
- Micro-USB cable (50 cm) (2 pcs.)
- User's Manual

Please verify all items are included in the box. If anything is missing, please contact the vendor.

MT/MR-1DM-x PINOUT

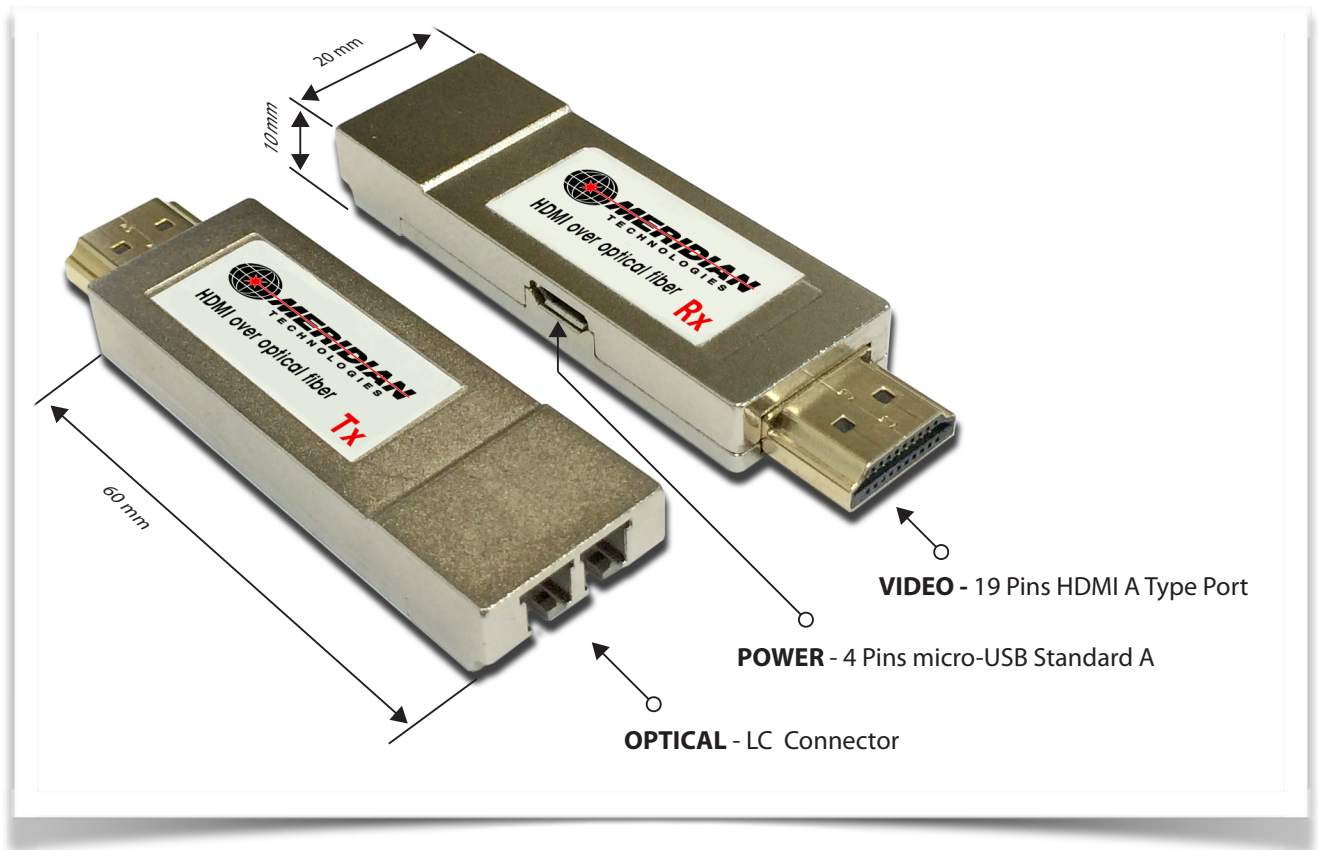


Figure 1 MT/MR-1DM-x Optical HDMI transmitter and receiver

CONNECTING AND OPERATING MT/MR-1DM-x

MT/MR-1DM-x System Connections

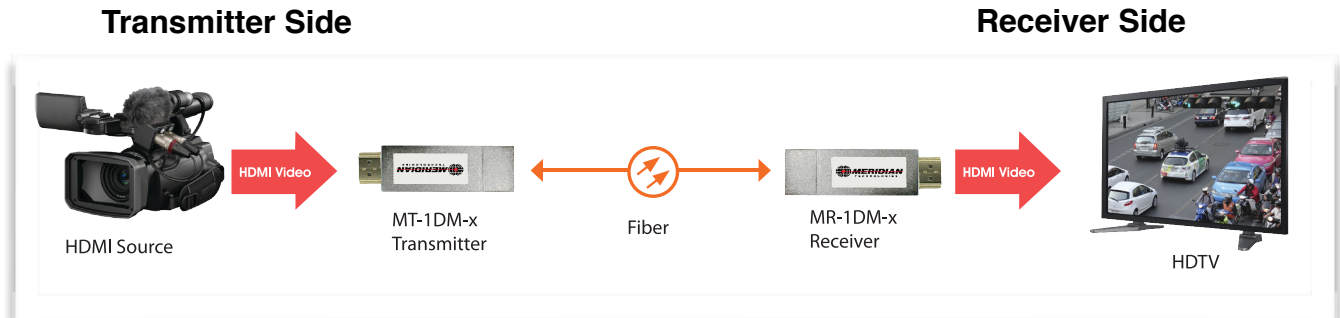


Figure 2. Connection of MT/MR-1DM-x HDMI Optical Transceiver

1. Connect HDMI port of MT-1DM-x (Transmitter) on the rear of the video source device.
2. Connect the Fiber Optic Cable to LC Optical Port of MT-1DM-x (Transmitter).
3. Connect power to the 5V DC port of MT-1DM-x (Transmitter) using provided USB cable.
4. Connect HDMI port of MR-1DM-x (Receiver) on the rear of the HDTV (HD monitor).
5. Connect the Fiber Optic Cable to LC Optical Port of MR-1DM-x (Receiver).
6. Connect power to the 5V DC port of MT-1DM-x (Transmitter) using provided USB cable.

TROUBLE SHOOTING

Q1: Where do the MT/MR-1DM-x TX and RX go?

A1: MT-1DM-x is the transmitter, and it is connected to video source devices

(PC, DVD, Broadcast Camera etc.).

MR-1DM-x is the receiver, and it is connected to HD display

(TV, monitor, projector, etc).

Q2: What is the maximum distance between source device and HD monitor?

A2: MT/MR-1DM-x can support :

- Multimode fiber – in excess of 300 meters (1000 feet) at 4Kx2K video resolution

Q3: Can I use the HD monitor's USB power for MR-1DM-x RX?

A3: Yes, if the HD monitor's USB power output can provide +5V and 0.5A current.

Note that MR-1DM-x RX may not work during HD monitor's power-saving mode.

Q4: I can't see the video image?

A4: 1) Check the HDMI connections to display and to source are securely connected.

2) Check both source and display supports HDCP. If one side does not support HDCP, then there will be no picture.

Q5: Does MT/MR-1DM-x supports HDCP (High-bandwidth Digital Content Protection)?

A5: Yes, MT/MR-1DM-x supports HDCP.

LIMITED WARRANTY

Meridian Technologies warrants this product to be in good working order for a period of one year from the date of purchase. If this product is not in good working order as warranted above, or should this product fail to be in good working order at any time during the warranty period, Meridian Technologies shall provide repair or replacement.

This warranty does not cover incidental or consequential damages incurred by consumer misuse, or modification of said product. For limited warranty service during the warranty period, please contact the retailer/distributor or call (516) 285-1000 to obtain an RMA number and instructions for returning the product.

The information contained herein is provided to the user as a convenience. While every effort has been made to ensure accuracy, Meridian Technologies is not responsible for damages that might occur because of errors or omissions, including any loss of profit or other commercial damage. The specifications described herein were current at the time of publication, but are subject to change at any time without prior notice.



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Meridian Technologies, Inc.

700 Elmont Road

Elmont, NY 11003

USA

