



*DigiView*TM Series



ST/SR-2DM-0 ST/SR-2DM-0/ST

2 Channel HDMI Optical Transceivers

User Manual

FEATURES

- Supports HDMI Video up to 4Kx2Kx30 Resolution
- HDMI 1.4a with HDCP Support
- DDC HPD Signal Support
- No Settings or Adjustments Necessary, Automatically Recognizes HDCP & EDID
- Supports up to 300m Transmission Distance with OM4 multimode fiber
- Standard HDMI Connector
- Rack Mounted Card Units
- Hot-Pluggable
- EMI/RFI Resistant
- 850nm VCSEL and PIN Photodetector
- Uses Small, Reliable LC Optical Connector (ST/SR-2DM-0) or ST Optical Connector (ST/SR-2DM-0/ST)
- Operating Temperature: 0~74°C

DESCRIPTION

The Meridian ST/SR-2DM-0 HDMI optical transmitter and receiver cards are designed to send 2 channels of 1.4a compliant HDMI Video with embedded audio over two optical fibers.

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

The 4K HDMI optical transceiver supports transmission of an uncompressed lossless HDMI 1.4a signals 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 first Optical fiber and HDCP & EDID sent back over second optical fiber.

Receiver converts the serial data back to an HDMI signal.

The link will operate over one fiber in DVI mode when the HDCP compliance is not required.

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.

These HDMI optical transmitter and receiver provide broadcast quality transmission of the industry standard range of digital video data rates. The entire electrical and optical subsystems are housed in a standard Meridian 1-slot card design for mounting in any venue, particularly those with space constraints. No user adjustments are needed thus ensuring fast deployment and setup with broadcast quality results.

INSTALLATION

Series ST/SR-2DM-0 products are one-slot wide cards and occupy one slot in Meridian's stand-alone chassis (SR-500, SR-1002, SR-1200, SR-1500) or SR-2001, SR-2000 series 19" equipment chassis.

Install card in to the chassis by orienting the card with the Meridian logo at the top of the card and slide onto the top and bottom card guides in to the chassis. Press securely on the top and bottom of the card to ensure that it is fully seated in the chassis so that the electrical connector mates with the chassis-mounted motherboard. Once installed, manually tighten the two thumbscrews located at the top and bottom of the card. Do not use tools to secure these and do not over tighten.

Note: A fully populated subrack should have forced-air cooling to avoid excessive heat generation inside the chassis. A fan assembly tray (P/N FA-2000) with three (3) fans is available and should be installed under the 19" SR-2000/1 whenever possible.

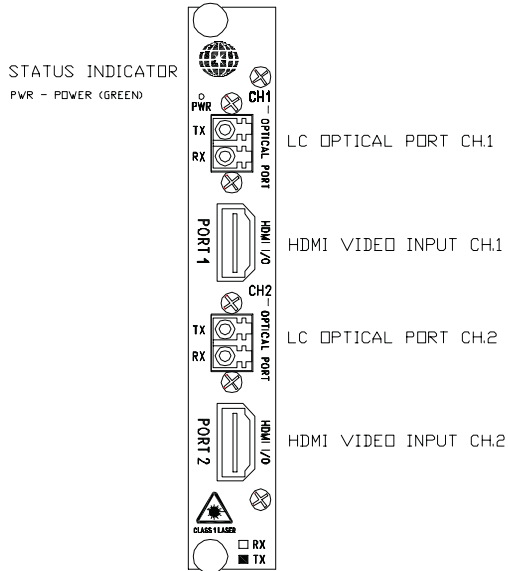
CONNECTION AND OPERATION



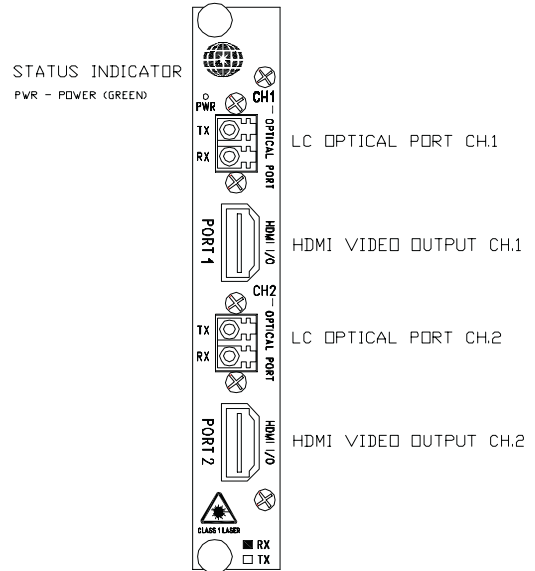
Figure 2. HDMI Optical Transceivers Connection (ST/SR-2DM-0 link shown)

1. Connect HDMI ports of Transmitter card to the video source devices.
2. Connect the Fiber Optic Cables to Optical Ports of Transmitter card.
3. Connect HDMI port of Receiver card on the rear of the HDTV (HD monitor).
4. Connect the Fiber Optic Cables to Optical Ports of Receiver card.

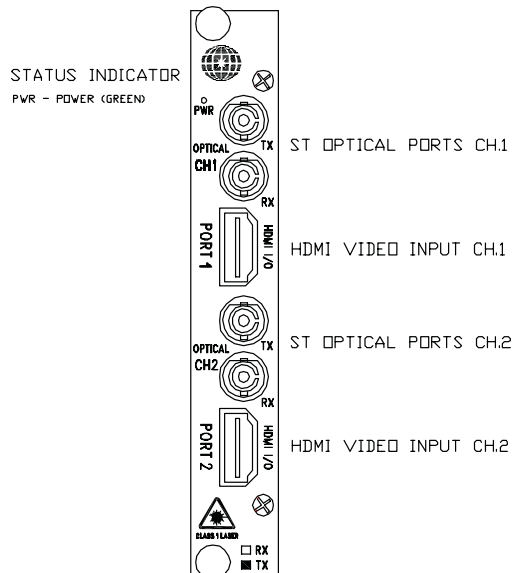
ST-2DM-X PINOUT DIAGRAM



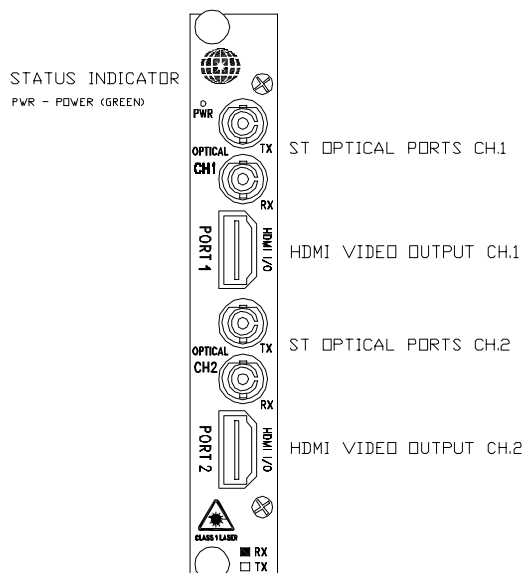
SR-2DM-X PINOUT DIAGRAM



ST-2DM-X/ST PINOUT DIAGRAM



SR-2DM-X/ST PINOUT DIAGRAM



MERIDIAN TECHNOLOGIES INC.
700 ELMONT ROAD, ELMONT, N.Y. 11003
Support: 516-285-1000, 516-285-0570
support@meridian-tech.com
www.meridian-tech.com
FILE NAME: SRP-2DM-X
11/12/2016 V.2

TROUBLE SHOOTING

Q1: Where do the ST/SR-2DM-0 TX and RX go?

A1: ST-2DM-0 is the transmitter, and it's connected to video source devices

(PC, DVD, Broadcast Camera etc.).

SR-2DM-x is the receiver, and it's connected to HD display

(TV, monitor, projector, etc).

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

A2: ST/SR-2DM-0 can support :

Multimode fiber (OM4 standard) – in excess of 300 meters (1000 feet) at 4Kx2K video resolution

Q3: I can't see the video image?

A3: 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.

Q4: Does ST/SR-2DM-0 supports HDCP (High-bandwidth Digital Content Protection)?

A4: Yes, ST/SR-2DM-0 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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Notes:



Meridian Technologies, Inc.
700 Elmont Road, Elmont NY 11003, USA
Telephone: +1 516-285-1000 Fax: +1 516-285-6300
E-mail: support@meridian-tech.com Web: www.meridian-tech.com
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