CrystalView DVI Micro-DL Extender

Quick Start Guide

CrystalView DVI Micro
Dual-Link
Fiber Extender
Limited Warranty

Rose Electronics® warrants the CrystalView™ Extender to be in good working order for one year from the date of purchase from Rose Electronics or an authorized dealer. Should this product fail to be in good working order at any time during this one-year warranty period, Rose Electronics will, at its option, repair or replace the Unit as set forth below. Repair parts and replacement units will be either reconditioned or new. All replaced parts become the property of Rose Electronics. This limited warranty does not include service to repair damage to the Unit resulting from accident, disaster, abuse, or unauthorized modification of the Unit, including static discharge and power surges.

Limited Warranty service may be obtained by delivering this unit during the one-year warranty period to Rose Electronics or an authorized repair center providing a proof of purchase date. If this Unit is delivered by mail, you agree to insure the Unit or assume the risk of loss or damage in transit, to prepay shipping charges to the warranty service location, and to use the original shipping container or its equivalent. You must call for a return authorization number first. Under no circumstances will a unit be accepted without a return authorization number. Contact an authorized repair center or Rose Electronics for further information.

ALL EXPRESS AND IMPLIED WARRANTIES FOR THIS PRODUCT INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO A PERIOD OF ONE YEAR FROM THE DATE OF PURCHASE, AND NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THIS PERIOD. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

IF THIS PRODUCT IS NOT IN GOOD WORKING ORDER AS WARRANTED ABOVE, YOUR SOLE REMEDY SHALL BE REPLACEMENT OR REPAIR AS PROVIDED ABOVE. IN NO EVENT WILL ROSE ELECTRONICS BE LIABLE TO YOU FOR ANY DAMAGES INCLUDING ANY LOST PROFITS, LOST SAVINGS OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF OR THE INABILITY TO USE SUCH PRODUCT, EVEN IF ROSE ELECTRONICS OR AN AUTHORIZED DEALER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR FOR ANY CLAIM BY ANY OTHER PARTY.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR CONSUMER PRODUCTS, SO THE ABOVE MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

IBM, AT, and PS/2 are trademarks of International Business Machines Corp. Microsoft and Microsoft Windows are registered trademarks of Microsoft Corp. Any other trademarks mentioned in this manual are acknowledged to be the property of the trademark owner.
This equipment generates, uses and can radiate radio frequency energy and if not installed and used properly, that is in strict accordance with the manufacturer’s instructions may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A digital device in accordance with the specifications of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

This digital apparatus does not exceed the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.

Le présent appareil numérique n’émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.

FCC

This device complies with part 15 of the FCC rules.

Operation is subject to the following two conditions:
(1) This device may not cause harmful interface, and
(2) this device must accept any interface received, including interface that may cause undesired operation.
Disclaimer

While every precaution has been taken in the preparation of this manual, the manufacturer assumes no responsibility for errors or omissions. Neither does the manufacturer assume any liability for damages resulting from the use of the information contained herein. The manufacturer reserves the right to change the specifications, functions, or circuitry of the product without notice.

The manufacturer cannot accept liability for damages due to misuse of the product or other circumstances outside the manufacturer’s control. The manufacturer will not be responsible for any loss, damage, or injury arising directly or indirectly from the use of this product.

Introduction

Thank you for choosing the Rose Electronics CrystalView DVI Micro-DL Extender. The CrystalView DVI Micro-DL extends a dual-link DVI video source up to 1,000 feet (300 meters) using a duplex SC-type multi-mode fiber cable. A DVI Video Monitor can be extended away from the host PC using the CrystalView DVI Micro-DL extender. Video resolutions up to 3840 x 2400 /60Hz and 1080p full-HD are supported.

The extension system consists of two units, a transmitter and a receiver. The transmitter connects directly to your PC’s DVI port, or the DVI port of any video output device.

No add-on cables or adapters are required. The receiver unit connects directly to the LCD monitor or display screen. The instructions in this manual assume a general knowledge of computer installation procedures, familiarity with cabling requirements, and some understanding of DVI device operation.

Features

- Extends dual-link DVI video up to 1,000ft (300m)
- Uses a duplex SC-type multi-mode (50/125um) fiber cable
- Supports HD resolutions to 1080p, 1920 x 1200 (WUXGA) and 3840 x 2400 (WQUXGA)
- TMDS video signal and EDID are transmitted over optical fiber
- Supports HDCP (Rev1.1) pass-through
- Supports HDMI 1.3
## Specifications

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<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>Resolution</td>
<td>3840 x 2400 (WQUXGA), 1920 x 1200 (WUXGA) and 1080p Full-HD</td>
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<tr>
<td>Video Bandwidth</td>
<td>3.5Gbps / channel</td>
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<tr>
<td>Maximum Pixel Clock</td>
<td>Single link (225Mhz) / Dual link (2 x 165Mhz)</td>
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<tr>
<td>Connectors</td>
<td>a) DVI-D 24 pin male video connector</td>
</tr>
<tr>
<td></td>
<td>b) SC type female fiber connector</td>
</tr>
<tr>
<td>Power</td>
<td>100 – 240 VAC – 5VDC, 2A.  1.0W Max (Transmitter or Receiver)</td>
</tr>
<tr>
<td></td>
<td>Transmitter: optional +5V / 2A adapter.  Receiver: +5V / 2A adapter</td>
</tr>
<tr>
<td>Dimensions (W x D x H)</td>
<td>2.98 x 1.97 x 0.6 inches</td>
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<tr>
<td></td>
<td>75.6 x 50 x 15.0 mm</td>
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<tr>
<td>Environmental</td>
<td></td>
</tr>
<tr>
<td>Operating Temp</td>
<td>32°F - 122°F (0°C - 50°C)</td>
</tr>
<tr>
<td>Storage Temp</td>
<td>-4°F - 158°F (-20°C - 70°C)</td>
</tr>
<tr>
<td>Approvals</td>
<td>CE, FCC, RoHS</td>
</tr>
<tr>
<td>Optical Characteristics</td>
<td></td>
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<tr>
<td>Source</td>
<td>850nm VCSEL</td>
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<tr>
<td>O/E Converter</td>
<td>Pin Photo Diode</td>
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<tr>
<td>Input/Output Signal</td>
<td>TMDS (DVI 1.0 standard)</td>
</tr>
<tr>
<td>Recommended Cable Type</td>
<td>2-channel 50/125um SC type multi-mode fiber</td>
</tr>
<tr>
<td>Part Number</td>
<td>CRK-T1DFDM-DM-DL</td>
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<tr>
<td></td>
<td>CrystalView DVI Micro Extender-Dual Link</td>
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**CAUTION**

Use only the included DC adapter (5V, 2A) for the receiver unit. The transmitter uses the computer power. No external DC adapter is required for the transmitter. Some computers cannot supply sufficient power to the transmitter. In this case, use the external DC adapter for the receiver.
**Troubleshooting**

a) No display on the DVI monitor  
- Check if the PC power is on.  
- Check if connection to the computer and the monitor are correct.  
- Turn the PC power off and on again.

b) Noise is shown on the screen.  
- Check the DVI connection.  
- Check the display resolution.  
- If the malfunction is not fixed by the above measures, please contact technical support

**Technical Support**

If you are experiencing problems, or need assistance in setting up, configuring or operating your CrystalView DVI Micro/DL, consult the troubleshooting section of this manual. If, however, you require additional information or assistance, please contact the Rose Electronics Technical Support Department at:

Phone: (281) 933-7673  
E-Mail: TechSupport@rose.com  
Web: www.rose.com

Technical Support hours are from: 8:00 am to 6:00 pm CST (USA), Monday through Friday.