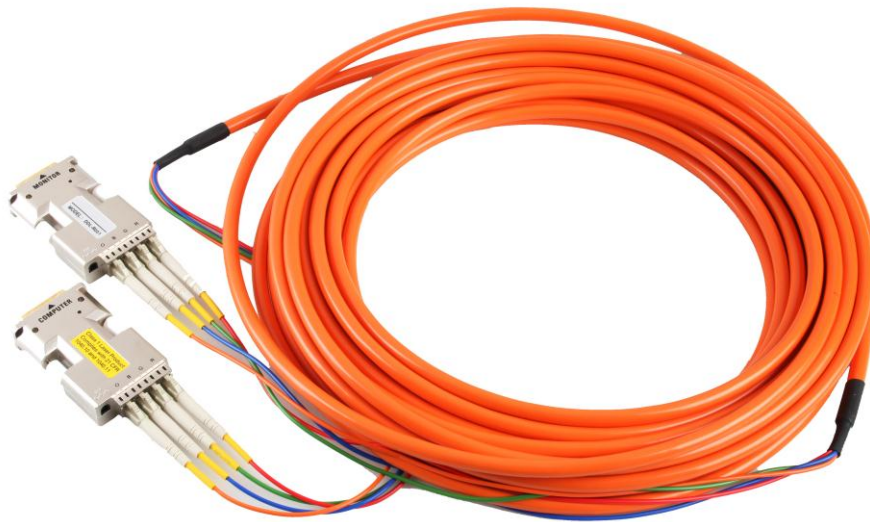




## DVI Extender over 4 Strand Multi-Mode Fiber Optic Cable



Model #: FO-DVI-1080LC-SET



**WUXGA**  
**1920x1200**

© 2010 Avenview Inc. All rights reserved.

The contents of this document are provided in connection with Avenview Inc. ("Avenview") products. Avenview makes no representations or warranties with respect to the accuracy or completeness of the contents of this publication and reserves the right to make changes to specifications and product descriptions at any time without notice. No license, whether express, implied, or otherwise, to any intellectual property rights is granted by this publication. Except as set forth in Avenview Standard Terms and Conditions of Sale, Avenview assumes no liability whatsoever, and disclaims any express or implied warranty, relating to its products including, but not limited to, the implied warranty of merchantability, fitness for a particular purpose, or infringement of any intellectual property right. Reproduction of this manual, or parts thereof, in any form, without the express written permission of Avenview Inc. is strictly prohibited.

## Table of Contents

Section 1: Getting Started .....	3
1.1 Important Safeguards .....	3
1.2 Safety Instructions .....	3
1.3 Regulatory Notices Federal Communications Commission (FCC) .....	4
1.4 Introduction .....	4
1.5 Package Contents.....	5
1.6 Before Installation.....	6
1.7 Installation .....	7
1.8 Self EDID Detecting .....	7
Section 2: Specifications.....	8
2.1 Signal Pin Assignment .....	9

## Section 1: Getting Started

### 1.1 Important Safeguards

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

#### What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
  - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
  - Repair or attempted repair by anyone not authorized by us.
  - Any damage of the product due to shipment.
  - Removal or installation of the product.
  - Causes external to the product, such as electric power fluctuation or failure.
  - Use of supplies or parts not meeting our specifications.
  - Normal wear and tear.
  - Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

### 1.2 Safety Instructions

The Avenview FO-DVI-1080LC-SET, DVI Extender over Fiber Optic has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipment's, the FO-DVI-1080LC-SET should be used with care. Read the following safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Do not dismantle the housing or modify the module.
- Dismantling the housing or modifying the module may result in electrical shock or burn.
- Refer all servicing to qualified service personnel.
- Do not attempt to service this product yourself as opening or removing housing may expose you to dangerous voltage or other hazards
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Have the module checked by a qualified service engineer before using it again.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

## 1.3 Regulatory Notices Federal Communications Commission (FCC)

This equipment has been tested and found to comply with Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

## 1.4 Introduction

The Avenview FO-DVI-1080LC-SET, DVI Extender over Fiber Optic DVI extension system is designed to let digital flat panel display extend over 500m (1650 feet) away from host based on DVI standard by optical transmission technology. Its small package and pseudo DDC detect function and Self-EDID detect function to use standard LC fiber connector allow users to install and utilize the device conveniently.

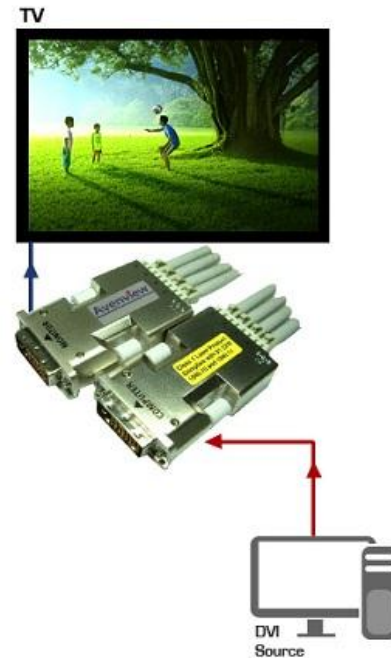
- Long distance transmission of digital graphic signal corresponding to T.M.D.S
- over 500 meter(1,640ft) by multi-mode glass fiber
- R, G, B, Clock signal is transmitted separately by multi-mode optical fiber
- Pseudo-DDC detection function for EDID information
- Self-detecting function for EDID information
- Maximum resolution WUXGA
- Optional external power supply for Transmitter (Automatic power switch is included.)

# FO-DVI-1080LC-SET

Extends a 1920x1200 resolution signal to up to 100m (330 feet)

## CABLE INDEX

- Output
- Input / Source
- S/PDIF
- Audio
- RS-232
- IR
- CAT-5 / CAT-6
- DVI Loop



## 1.5 Package Contents

Before you start the installation of the converter, please check the package contents.

- FO-DVI-1080LC Transmitter x 1
- FO-DVI-1080LC Receiver x 1
- Power Adapter (+5VDC) x 1
- User's Manual x 1

*Fiber Optic Cable is not included in the package*

## 1.6 Before Installation

- Put the product in an even and stable location. If the product falls down or drops, it may cause an injury or malfunction.
- Don't place the product in too high temperature (over 50°C), too low temperature (under 0°C) or high humidity.
- Use the DC power adapter with correct specifications. If inappropriate power supply is used then it may cause a fire.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.



## 1.7 Installation

Avenview FO-DVI-1080LC-SET consists of a Transmitter and a Receiver. The Transmitter should be connected to the computer DVI port and Receiver should be connected to the DVI port of the digital display. This product is designed to connect with 4 channel standard Fiber Optic cable of LC Type. As marked on FO-DVI-1080LC-SET, connect “R” to the red color optic cable, “G” to the green, “B” to blue one and “O” to orange.

To setup Avenview FO-DVI-1080LC-SET follow these steps for connecting to a device:

1. Connect FO-DVI-1080LC Transmitter unit to DVI source
2. Connect FO-DVI-1080LC Receiver unit to DVI port of display.
3. Connect 4 Strand Fiber Optic LC Type cable to both Transmitter and Receiver.
4. Plug the power to Receiver Unit.
5. Power on DVI Source and DVI Display.

*Use the DC adapter (included in the package) for the Receiver. The Transmitter which is connected to a computer uses power from the computer.*

## 1.8 Self EDID Detecting

You can change factory setting of resolution due to connect other monitors as following orders.

1. Power on your display.
2. Connect transmitter to the DVI of display.
3. Plug DC power in to the transmitter.
4. Check if LED blinks rapidly for a few seconds. EDID is well acknowledged once the blinking stops.
5. Connect transmitter to the PC and receiver to the display. Then please plug the DC power in to the receiver.
6. Connect the optical fiber between transmitter and receiver. Using multimode optical fiber is a must.
7. Restart your computer.

*If Transmitter's power LED doesn't light up, then plug the DC power adapter for Transmitter*

## Section 2: Specifications

Item	Description	
<b>Units</b>	FO-DVI-1080LC (Transmitter)	FO-DVI-1080LC (Receiver)
<b>Unit Description</b>	Transmitter	Receiver
<b>Input Signal</b>	TMDS Signal (DVI 1.0 Standard)	
<b>Output Signal</b>	TMDS Signal (DVI 1.0 Standard)	
<b>Video Bandwidth</b>	1.65Gbps	
<b>Supported Resolution &amp; Distance</b>	SXGA 1280 x 1024 @ 700 meters (2300 feet) UXGA 1600 x 1200 @ 500 meters / 1650 feet WUXGA 1920 x 1200 @ 100 meters / 330 feet)	
<b>Optical Converter</b>	4 ch 850 nm Multi-Mode VCSEL	4 ch GaAs PIN photo Diode
<b>DVI Connector</b>	24 pin DVI-D Plug	
<b>Optical Connector</b>	1 * 4 LC Connector	
<b>Dimensions (L x W x H)</b>	2.8" x 1.6" x 0.6"	
<b>Power Supply</b>	-0.3 ~ 5.5V	
<b>Environmental</b>		
<b>Operating Temperature</b>	32° ~ 104°F (0° to 40°C)	
<b>Storage Temperature</b>	-4° ~ 140°F (-20° ~ 60°C)	
<b>Relative Humidity</b>	20~90% RH (no condensation)	



## 2.1 Signal Pin Assignment

### TRANSMITTER

Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	T.M.D.S. Data2-	9	T.M.D.S. Data1-	17	T.M.D.S. Data0-
2	T.M.D.S. Data2+	10	T.M.D.S. Data1+	18	T.M.D.S. Data0+
3	T.M.D.S. Data2 Shield	11	T.M.D.S. Data1 Shield	19	T.M.D.S. Data0 Shield
4	No Connect	12	No Connect	20	No Connect
5	No Connect	13	No Connect	21	No Connect
6	DDC Clock (Transmitter)	14	+5V Power	22	T.M.D.S. Clock Shield
7	DDC Data (Transmitter)	15	Ground (for +5V)	23	T.M.D.S. Clock+
8	No Connect	16	Hot Plug Detect	24	T.M.D.S. Clock-

### RECEIVER

Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	T.M.D.S. Data2-	9	T.M.D.S. Data1-	17	T.M.D.S. Data0-
2	T.M.D.S. Data2+	10	T.M.D.S. Data1+	18	T.M.D.S. Data0+
3	T.M.D.S. Data2 Shield	11	T.M.D.S. Data1 Shield	19	T.M.D.S. Data0 Shield
4	No Connect	12	No Connect	20	No Connect
5	No Connect	13	No Connect	21	No Connect
6	No Connect	14	Out +5V Power	22	T.M.D.S. Clock Shield
7	No Connect	15	Ground (for Out +5V)	23	T.M.D.S. Clock+
8	No Connect	16	No Connect	24	T.M.D.S. Clock-



**Disclaimer**

While every precaution has been taken in the preparation of this document, Avenview Inc. assumes no liability with respect to the operation or use of Avenview hardware, software or other products and documentation described herein, for any act or omission of Avenview concerning such products or this documentation, for any interruption of service, loss or interruption of business, loss of anticipatory profits, or for punitive, incidental or consequential damages in connection with the furnishing, performance, or use of the Avenview hardware, software, or other products and documentation provided herein.

Avenview Inc. reserves the right to make changes without further notice to a product or system described herein to improve reliability, function or design. With respect to Avenview products which this document relates, Avenview disclaims all express or implied warranties regarding such products, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, and non-infringement.