

# HDMI Extender over Fiber Optic

## User's Guide



Models  
FO-HDMI-SET

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## 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

- 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.

### 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

Avenview FO-HDMI-SET consists of a Transmitter and Receiver that lets you extend HDMI signal from DVD Player, Blu-ray Player Set-top box, console systems or other video equipments over fiber optical signal without any signal degradation.

- High Speed and long distance transmission by Optical fiber (LC type Multi-Mode 4-ch fiber).
- Extends up to 100 meters (330 feet)
- Compatible with HDMI 1.3 Standard
- Backward compatibility with DVI Standard 1.0
- Supports HDCP compliant device
- Supports up to 1080p for HDTV and UXGA (1600 x 1200) resolution
- DDC and DEC signal line is transmitted by copper line (CAT5) between internal and external power

## 1.5 Package Contents

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

- Receiver x 1
- Transmitter x1
- Power Adapter (+5VDC, 1.2A) x1
- Copper male to male HDMI Cable (-.5m) x2
- User's Manual

## 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

To setup Avenview FO-HDMI-SET follow these steps for connecting to a device:

1. Power off display source such as DVD Player, Set-top box
2. Connect the enclosed copper HDMI cable into each display source and display
3. Connect copper HDMI cable which is attached to display source into FO-HDMI-SET Transmitter
4. Connect Transmitter to the HDMI cable (course) and Receiver to HDMVI Cable (display)
5. Connect the Optical cable (4ch-LC standard connector) between Transmitter and Receiver by order no 1, 2, 3, 4
6. Connect the UTP cable (RJ45 connector) for DDC
7. Power on the source and display (check the LED light on of Transmitter and Receiver)

*If there is no LED light on, insert the enclosed external power adapter into Transmitter.*

## 1.8 General Troubleshooting

Problem	Possible Solution
No Image	<ul style="list-style-type: none"><li>• Check if connection to the computer and the monitor are correct.</li><li>• Check length of the cable between Transmitter and Receiver</li></ul>
Screen Defects Appear	<ul style="list-style-type: none"><li>• This product supports up to UXGA resolution.</li><li>• Check the DVI connection</li><li>• Check the maximum resolution range of the graphics card.</li></ul>

## Section 2: Specifications

Item	Description
<b>Video Bandwidth</b>	165MHz (Single Link)
<b>Video Input</b>	1 Single Link HDMI
<b>Input Connector</b>	1 HDMI Type A Receptacle
<b>Video Output</b>	1 Single Link HDMI
<b>Power</b>	5V 1.2A DC
<b>Power Consumption</b>	0.55Watt
<b>Output Connector</b>	1HDMI Type A Receptacle
<b>Maximum Supported Resolution</b>	Up to 1080p UXGA 1600 x 1200 @ 60Hz
<b>Maximum Cable Length</b>	100 meters (330 feet)

### *Optical*

<b>Optical Source</b>	850nm VCSEL
<b>O/E Converter</b>	PIN Photo Diode
<b>Fiber Type</b>	Multi-Mode Fiber

### *Environmental*

<b>Operation</b>	0° to 50°C Degree
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## 2.1 Signal Pin Assignment

Pin	Signal	Pin	Signal
1	TMDS Data 2+	2	TMDS Data2 Shield
3	TMDS Data 2-	4	TMDS Data 1+
5	TMDS Data 1 Shield	6	TMDS Data 1-
7	TMDS Data 0+	8	TMDS Data0 Shield
9	TMDS Data 0-	10	TMDS Clock+
11	TMDS Clock Shield	12	TMDS Clock-
13	CEC	14	Reserved (N.C. on device)
15	SCL	16	SDA
17	DDC/CEC Ground	18	+5V Power
19	Hot Plug Detect		



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