



User Manual

TL-FO-DVI

Mini 4K DVI Fiber Extender



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Version: TL-FO-DVI_160621

Preface

Read this user manual carefully before using this product. Pictures shown in this manual is for reference only, different model and specifications are subject to real product.

This manual is only for operation instruction only, not for any maintenance usage.

Trademarks

Product model and its logo are trademarks. Any other trademarks mentioned in this manual are acknowledged as the properties of the trademark owner. No part of this publication may be copied or reproduced without our prior written consent.

FCC Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.



SAFETY PRECAUTIONS

To insure the best from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- Unpack the equipment carefully and save the original box and packing material for possible future shipment
- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- Do not dismantle the housing or modify the module. It may result in electrical shock or burn.
- Using supplies or parts not meeting the products' specifications may cause damage, deterioration or malfunction.
- Refer all servicing to qualified service personnel.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Do not put any heavy items on the extension cable in case of extrusion.
- Do not remove the housing of the device as opening or removing housing may expose you to dangerous voltage or other hazards.
- Install the device in a place with fine ventilation to avoid damage caused by overheat.
- 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.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Unplug the power cord when left unused for a long period of time.
- Information on disposal for scrapped devices: do not burn or mix with general household waste, please treat them as normal electrical wastes.

Introduction

This product is a mini DVI optical fiber extender for 4K resolution. It contains a transmitter module and a receiver module. Compatible with HDMI1.4, it transmits high-definition DVI/ HDMI (max 3840x2160@30Hz) up to 300m/ 1km over qualified OM3 multi-mode/ single mode cable. It also offers manual EDID management to ensure reliable AV distribution.

Package List

1* TL-FO-DVI (Transmitter and Receiver are included)

2* Power Adapter (DC 5V 1A)

1* User Manual

Notes: Check whether all the items listed above are included in your package. If not, contact your dealer to make up.

Appearances

Transmitter:



- ② **Link led:** Illuminate blue when connected with source; blink blue when capturing EDID data

There are a **Power led** on its rear panel, it will illuminate red when powered on.

- ③ **EDID Reader:** Stick to capture the EDID data of the connected display for reliable transmission
- ④ **Power:** Insert a DC 5V 1A power adapter here
- ⑤ **Optical Out:** Connect with **Optical In** port of receiver via a fiber cable

Receiver:



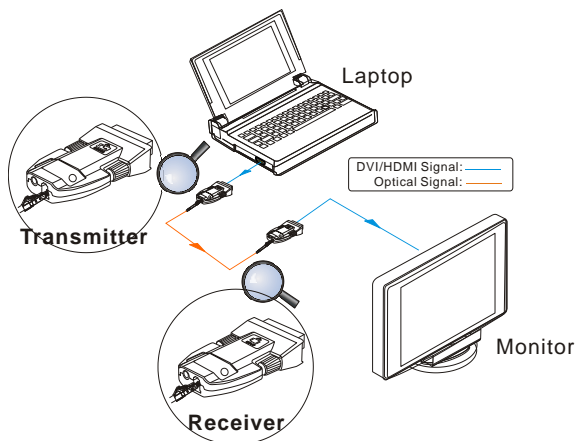
- ② **Link led:** Illuminate blue when connected with source; blink blue when capturing EDID data

There are a **Power led** on its rear panel, it will illuminate red when powered on.

- ③ **Power:** Insert a DC 5V 1A power adapter here
- ④ **Optical Out:** Connect with **Optical Out** port of transmitter via a fiber cable

Connection:

The figure below illustrates a typical connection that can be utilized with TL-FO-DVI:



- Step1.** Connect the transmitter and a DVI source device (e.g. a PC) directly over a DVI cable.
- Step2.** Connect the **Optical Out** port of the transmitter to the **Optical In** port of the receiver with an optical fiber cable.
- Step3.** Connect the receiver and a DVI sink device (e.g. a monitor) directly or over a DVI cable.
- Step4.** Plug DC 5V power adapters to the **Power** ports of both the transmitter and the receiver.

Important to know:

- 1) To ensure normal and reliable transmission, plug the DVI display to the **DVI In** port of the transmitter, and stick the **EDID Reader** to manually capture the EDID data of the display.
- 2) Utilize OM3 optical fiber cable to connect the transmitter& receiver only.

Specification

Model Spec	Transmitter	Receiver
Input		
Input Signal	1 DVI	1 Optical Fiber
Input Connector	Female DVI-D	LC connector
Signal	Digital AV signal, compliant with HDMI1.4	Optical Fiber
Output		
Output	1 Optical Fiber	1 HDMI
Output Connector	LC connector	Female DVI-D
Signal	Optical Fiber	Digital AV signal, compliant with HDMI1.4
General		
Resolution	640x480@60Hz, 640x480@70Hz, 640x480@72Hz, 640x480@75Hz, 800x600@60Hz, 800x600@70Hz, 800x600@72Hz, 800x600@75Hz, 1024x768@60Hz, 1024x768@70Hz, 1024x768@75Hz, 1280x720@60Hz, 1280x1024@60Hz, 1280x1024@75Hz, 1360x768@60Hz, 1440x900@60Hz, 1600x1200@60Hz, 1920x1080@60Hz, 1920x1200@60Hz, 3840x2160@24Hz, 3840x2160@25Hz, 3840x2160@30Hz	
Audio Format	PCM, Dolby Digital, DTS, DTS-HD	
HDMI Standard	HDMI1.4	
Transmission Distance	≤1km via single mode fiber ≤300m via OM3 multimode fiber	
Temperature	0 ~ 50℃	
Reference Humidity	10% ~ 90%	
Power Supply	Input: AC 100~240V, 50/60Hz; Output: DC 5V 1A	
Power Consumption	≤4.35w	
Dimension (W*H*D)	69.5*10.2*40 mm	69.5*10.2*40 mm
Weight	63g	63g

Troubleshooting & Maintenance

Problems	Causes	Solutions
Color losing or vague/ double image in HDMI display	Poor quality of the optical fiber cable	Change for qualified OM3 cable.
Power led is off, operations don't work	Not been powered	Power up the unit
	Poor contact of power port	Make sure power adapter is in well contact
No output on the display	Source/ Display is off	Turn on the source/ display
	Poor contact of DVI ports	Check the DVI ports one by one to make sure they're in well contact.
	The display doesn't support the resolution	Connect the display to the transmitter and capture its EDID data before using.
	Input signal is with HDCP	Change for signals that are not with HDCP.

If your problem persists after following the above troubleshooting steps, seek further help from authorized dealer or our technical support.

After-sales Service

If there appear some problems when running the device, please check and deal with the problems referring to this user manual. Any transport costs are borne by the users during the warranty.

- 1) **Product Limited Warranty:** We warrant that our products will be free from defects in materials and workmanship for **two years**. Please see warranty page posted on www.tlnetworkx.com for more info.
- 2) **What the warranty does not cover (servicing available for a fee):**
 - Warranty expiration.
 - Factory applied serial number has been altered or removed from the product.
 - Damage, deterioration or malfunction caused by:
 - Normal wear and tear
 - Use of supplies or parts not meeting our specifications
 - No certificate or invoice as the proof of warranty.
 - The product model showed on the warranty card does not match with the model of the product for repairing or had been altered.
 - Damage caused by force majeure.
 - Servicing not authorized
 - Any other causes which does not relate to a product defect
 - Delivery, installation or labor charges for installation or setup of the product
- 3) **Technical Support:** Email to our after-sales department or make a call, please inform us the following information about your cases.
 - Product version and name.
 - Detailed failure situations.
 - The formation of the cases.

Remarks: For any questions or problems, please try to get help from your local distributor.