

User Manual



FO1HD-4K

4K Optical Fiber Extender



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Version: FO1HD-4K_2015V1.2


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. The functions described in this version are updated till July 2015. Any changes of functions and parameters since then will be informed separately. Please refer to the dealers for the latest details.

All product function is valid till 2015-7-7.

Trademarks

Product model, ALTIMIUM and its logo  are trademarks of Altium. 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 the prior written consent of Altium.

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.

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Introduction

FO1HD-4K is a mini optical fiber extender for 4K resolution. It contains a transmitter module and a receiver module. Compatible with multi-mode and single-mode fiber, it extends graphic TMDS signals up to 400m/300m via single-mode cable/ multi-mode cable. With its HDMI1.4& HDCP compliance design, FO1HD-4K supports high definition (up to 4096x2160@30Hz, 1080p 3D) signal.

Package List

1*FO1HD-4K (Tx and Rx are included)
 2* Power Adapter
 1*Optical Fiber Cable (single-mode)
 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

FO1HDT-4K:



PWR led: illuminate when powered up

LINK led: illuminate when connecting Tx& Rx

USB: Insert a DC 5V 1A power adapter here

OUT: Connect with **IN** of Rx

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FO1HDR-4K:



PWR led: illuminate when powered up

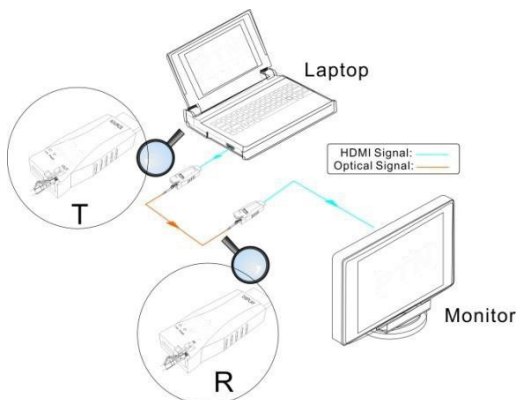
LINK led: Illuminate when connecting Tx& Rx

USB: Insert a DC 5V 1A power adapter here

IN: Connect with **OUT** of Rx

Connection:

The figure below illustrates a typical connection that can be utilized with FO1HD-4K:



Step1. Insert the transmitter into the HDMI port of a HDMI source device (e.g. a PC).

Step2. Connect the **OUT** port of the transmitter to the **IN** port of the receiver with an optical fiber cable.

Step3. Insert the receiver into the HDMI port of a HDMI sink device (e.g. a monitor).

Step4. Plug DC 5V power adapters to the **USB** ports of both the transmitter and the receiver.

Note: Connect the transmitter/ receiver with HDMI source/ sink directly or through a HDMI cable.

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Specification

Model	FO1HD-4K	FO1HDR-4K
Spec		
Input		
Input Signal	1 HDMI	1 Optical Fiber
Input Connector	19-pin Type A male HDMI	LC connector
Signal	HDMI1.4	Optical Fiber
Output		
Output	1 Optical Fiber	1 HDMI
Output Connector	LC connector	19-pin Type A male HDMI
Signal	Optical Fiber	HDMI1.4
General		
Resolution	4k (max)	
Audio Format	PCM, Dolby Digital, DTS, DTS-HD	
HDMI Standard	Support HDMI1.4 and HDCP1.4	
Transmission Distance	$\leq 400\text{m}$ via single-mode fiber $\leq 300\text{m}$ via multi-mode fiber	
Temperature	0 ~ 50°C	
Reference Humidity	10% ~ 90%	
Power Supply	Input: AC 100~240V, 50/60Hz; Output: DC 5V 1A	
Power Consumption	$\leq 2.5\text{w}$	$\leq 2.3\text{w}$
Dimension (W*H*D)	60*10*22 mm	60*10*22 mm
Weight	26g	26g

Troubleshooting & Maintenance

Problems	Causes	Solutions
Color losing or vague/ double image in HDMI display	Poor quality of the HDMI cable (if used)	Change for qualified cable.
Power led is off, operations don't work	Not been powered	Power up the unit
	Poor contact of USB 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 HDMI ports	Check the HDMI ports one by one to make sure they're in well contact.

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.

- 1) **Product Limited Warranty:** ALTIMIUM warrants that its products will be free from defects in materials and workmanship for **two years**, which starts from the first day the product leaves warehouse (check the SN mark on the product).
Proof of purchase in the form of a bill of sale or receipted invoice must be presented to obtain warranty service.
- 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 by ALTIMIUM
 - 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, or email ALTIMIUM at: contact@altimum.com



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