



# HD Extender 1FO

**EXT-HD-CP-FM10**  
**User Manual**



**[www.gefen.com](http://www.gefen.com)**



## ASKING FOR ASSISTANCE

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**Rev A1**

# CONTENTS

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- 1 Introduction
- 2 Operation Notes
- 3 Features
- 4 Cable Layout
- 5 Cable Descriptions
- 6 Connecting the HD Extender 1FO
- 6     Wiring Diagram
- 7 Operating the HD Extender 1FO
- 8 Specifications
- 9 Warranty

# INTRODUCTION

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Congratulations on your purchase of the Gefen HD Extender 1FO.  
Your complete satisfaction is very important to us.

## **Gefen**

Gefen delivers innovative, progressive computer and electronics add-on solutions that harness integration, extension, distribution and conversion technologies. Gefen's reliable, plug-and-play products supplement cross-platform computer systems, professional audio/video environments and HDTV systems of all sizes with hard-working solutions that are easy to install and simple to operate.

## **The Gefen HD Extender 1FO**

The HDMI fiber optic pigtail module extender with HDCP support extends HDMI up to 1000 feet (300 meters) using a single-strand 50/125 $\mu$ m multimode (OM2) SC-terminated fiber optic cable. It supports resolutions up to 1080p Full HD and HD lossless audio formats like LCPM 7.1 audio, Dolby® Digital Plus, Dolby® TrueHD, and DTS-HD® Master Audio™. Optical signal transmission provides galvanic isolation and immunity to electromagnetic interference compared to similar copper based extension modules. The pigtail design of the Sender and Receiver modules relieves stress and clutter on the source and display connector panels. Their compact design makes them ideal for fitting neatly behind equipment for a clean installation, making it a great way to easily extend HDMI.

## **How It Works**

The Sender pigtail end plugs into the HDMI source. The Receiver pigtail end plugs into the HDTV display. Connect a single-strand 50/125 $\mu$ m multimode (OM2) SC-terminated fiber optic cable from the Sender to the Receiver module. Plug the power supply into the Receiver module and a vibrant Hi-Def picture will appear on your display.

## OPERATION NOTES

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### PLEASE READ THESE NOTES BEFORE INSTALLING OR OPERATING THE HD EXTENDER 1FO

- In most situations, the Sender pigtail module does not need to be externally powered unless the source does not supply enough power through the HDMI connector. If the Sender requires a separate power supply only use Gefen part no. EXT-PS52AIP-1.3. Using a different power supply other than the recommended type may cause fatal damage to the Sender pigtail module.

# FEATURES

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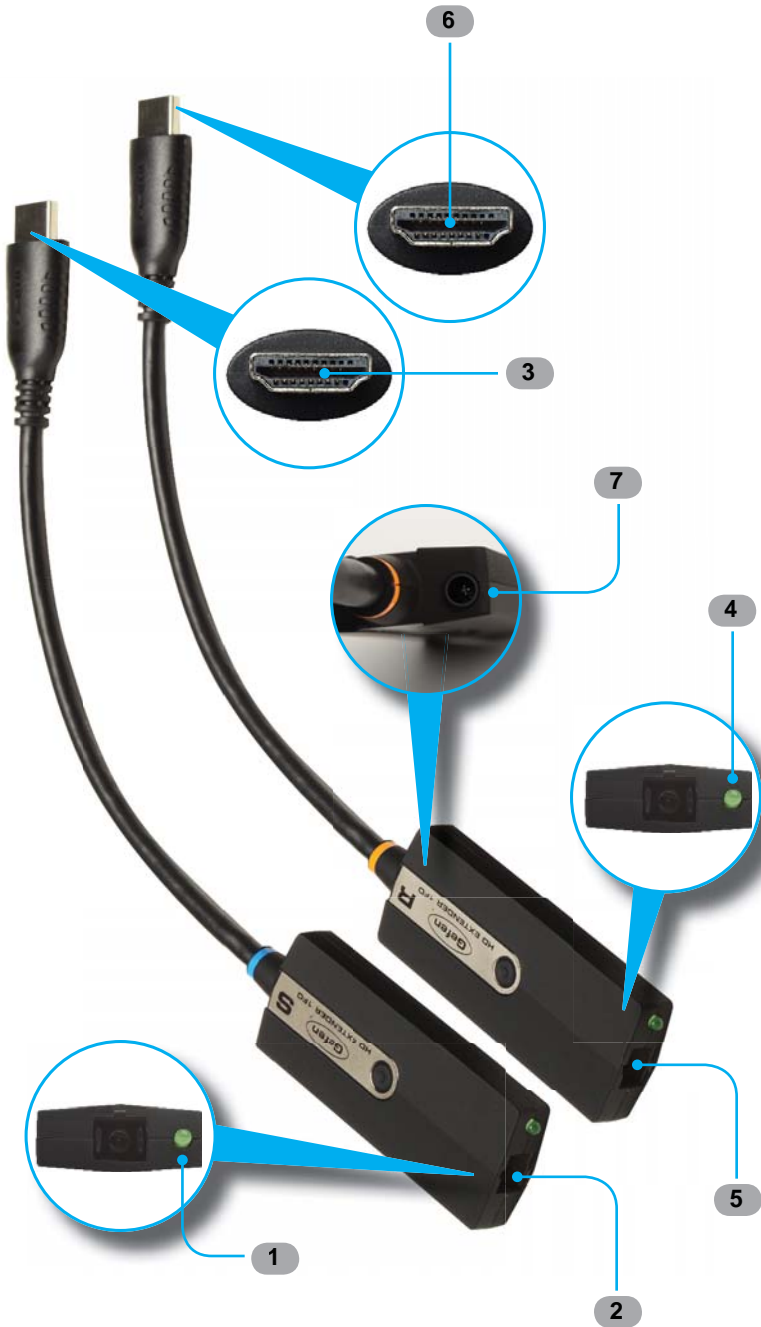
## Features

- Extends HDMI up to 1000 feet (300 meters) using a single-strand 50/125µm multimode (OM2) SC-terminated fiber optic cable
- Supports resolutions up to 1080p Full HD
- Supports HD lossless audio: LCPM 7.1 audio, Dolby® Digital Plus, Dolby® TrueHD, and DTS-HD® Master Audio™
- Fiber optic transmission eliminates electromagnetic interference (EMI)
- Pigtail design relieves stress and clutter on the source and display connector panels
- 3DTV pass-through
- DDC bidirectional support
- HDCP pass-through
- Supports Deep Color
- Compact Sender and Receiver modules provide a clean, easy installation
- FCC and CE compliant for EMI/RFI emission

## Package Includes

- (1) HD Extender 1FO - Sender Pigtail module
- (1) HD Extender 1FO - Receiver Pigtail module
- (1) 5V DC power supply
- (1) Quick-Start Guide

# CABLE LAYOUT





## CABLE DESCRIPTIONS

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**1 Power Indicator (Sender module)**

This LED will glow bright green when the Hi-Def source is supplying sufficient power to the Sender module. If the LED flashes green, then the source is unable to power the Sender module. See page 7 for more information.

**2 Fiber Optic Connector (Sender module)**

Connect an SC-terminated fiber optic cable from the Sender pigtail module to the SC fiber connector on the Receiver pigtail module.

**3 HDMI Connector, male (Sender module)**

Connect this end of the Sender pigtail module to the Hi-Def source.

**4 Power Indicator (Receiver module)**

This LED will glow bright green when one of the included 5V DC power supplies is connected to the power receptacle on the Receiver module.

**5 Fiber Optic Connector (Receiver module)**

Connect the SC-terminated fiber optic cable from the Sender pigtail module to the SC fiber connector on the Receiver pigtail module.

**6 HDMI Connector, male (Receiver module)**

Connect this end of the Receiver pigtail module to the HDTV display.

**7 Power Receptacle (Sender / Receiver module)**

Connect the included 5V DC power supply to this power receptacle. Both the Sender and Receiver module have power receptacles. However, the Sender module does not need to be externally powered unless the source does not supply enough power through the HDMI connector.

# CONNECTING THE HD EXTENDER 1FO

## How to Connect the HD Extender 1FO

1. Connect the Sender pigtail module to the Hi-Def source.
2. Connect the Receiver pigtail module to the HDTV display.
3. Connect a single strand of SC-terminated fiber optic cable between the fiber optic connectors on the Sender and Receiver pigtail modules.
4. Connect the included 5V DC power supply to power receptacle on the Receiver pigtail module.
5. Power-on the display and Hi-Def source.

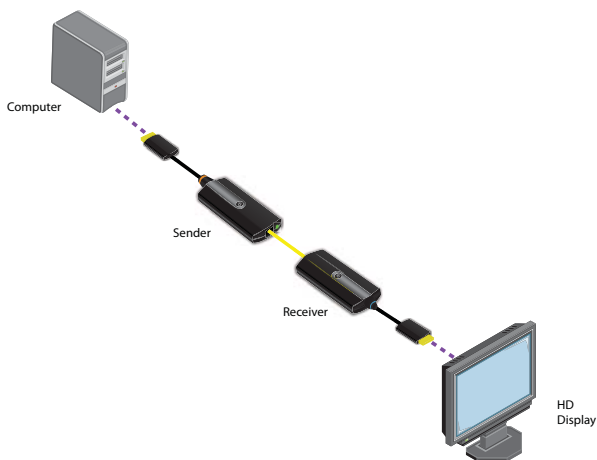


**NOTE:** The Sender module does not need to be externally powered unless the Hi-Def source does not supply enough power through the HDMI connector. The Receiver module must always be powered using the included 5V DC power supply.

## Wiring Diagram for the HD Extender 1FO



**HDMI**   
**FIBER OPTIC CABLE** 



**EXT-HD-CP-FM10**

# OPERATING THE HD EXTENDER 1FO

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## Power Indicators

The power indicators on both the Sender and Receiver modules of the HD Extender 1FO provide information about the current power state.

### *Normal operation*

If the power indicator on both the Sender and Receiver module glows bright green, then both the Sender and Receiver module have sufficient power.

**Sender module**



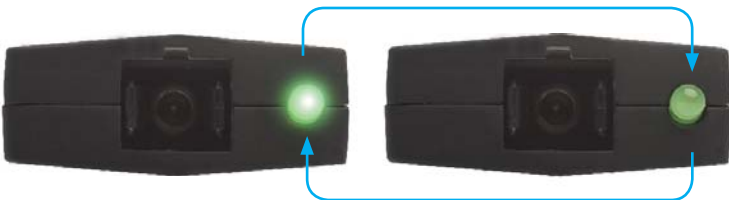
**Receiver module**



### *No power / insufficient power on the Sender module*

If the Hi-Def source is unable to supply the required 5V to the Sender module, then the power indicator on the Sender module will flash bright green. If this is the case, then connect a secondary 5V DC power supply to the power receptacle on the Sender module (use Gefen part no. EXT-PS52AIP-1.3).

**Sender module**



## SPECIFICATIONS

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Maximum Pixel Clock.....	225 MHz
Video Input Connector (Sender).....	(1) HDMI Type-A, 19-pin, male
Video Output Connector (Receiver).....	(1) HDMI Type-A, 19-pin, male
Link Connector (Sender/Receiver).....	(1) Type SC fiber (50 /125µm)
Power Supply (Receiver).....	5V / 2A DC
Power Supply (Sender).....	5V / 2A DC (not needed for most applications)
Power Consumption (Receiver).....	1.5W (max.)
Operating Temperature.....	0 to +122 °F (0 to +50 °C)
Storage Temperature.....	-4 to +158 °F (-20 to +70 °C)
Relative Humidity.....	10% to 80%
Dimensions (W x H x D).....	1.18" x 0.47" x 10.71" (29.97mm x 11.93mm x 272.03mm)
Shipping Weight.....	1lb (0.45 kg)

## WARRANTY

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Gefen warrants the equipment it manufactures to be free from defects in material and workmanship.

If equipment fails because of such defects and Gefen is notified within two (2) years from the date of shipment, Gefen will, at its option, repair or replace the equipment, provided that the equipment has not been subjected to mechanical, electrical, or other abuse or modifications. Equipment that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for ninety (90) days from the day of reshipment to the Buyer.

This warranty is in lieu of all other warranties expressed or implied, including without limitation, any implied warranty or merchantability or fitness for any particular purpose, all of which are expressly disclaimed.

1. Proof of sale may be required in order to claim warranty.
2. Customers outside the US are responsible for shipping charges to and from Gefen.
3. Copper cables are limited to a 30 day warranty and cables must be in their original condition.

The information in this manual has been carefully checked and is believed to be accurate. However, Gefen assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will Gefen be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. The technical information contained herein regarding the features and specifications is subject to change without notice.

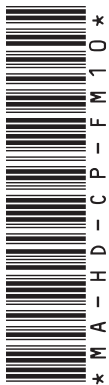
For the latest warranty coverage information, refer to the Warranty and Return Policy under the Support section of the Gefen Web site at [www.gefen.com](http://www.gefen.com).

## PRODUCT REGISTRATION

**Please register your product online by visiting the Register Product page under the Support section of the Gefen Web site.**







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This product uses UL or CE listed power supplies.



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