

Gefen

®

HD-1000 Extender

EXT-HD-1000

User Manual



www.gefen.com

ASKING FOR ASSISTANCE

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Notice

Gefen, LLC reserves the right to make changes in the hardware, packaging, and any accompanying documentation without prior written notice.

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HD-1000 is a trademark of Gefen, LLC

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INTRODUCTION

The Gefen HD-1000 allows an HDMI video signal to be extended up to 330 feet (1640 w/o HDCP) using multi-mode LC-LC fiber optic cable. Fiber Optics technology allows the HD-1000 to carry video signals over long distances that are not possible with other technologies. Fiber Optic cables are immune to video signal corruption from electromagnetic interference (EMI), ensuring a crystal clear picture.

How It Works

The HD•1000S sender unit sits next to your set-top box or DVD player source. Cables supplied with the HD•1000 connect your HDMI™ 1.3 source to the sender unit. The display plugs into the back of the receiver unit. One CAT-5 cable and a multi mode LC fiber optic cable connect the Sender and the Receiver units to each other.

OPERATION NOTES

READ THESE NOTES BEFORE INSTALLING OR OPERATING THE HD-1000

- 50 or 62.5 micron multi-mode fiber optic cable is required for operation of the HD-1000. Maximum extension range of 330 feet (100 meters) when the source requires HDCP. One CAT-5, CAT-5e or CAT6 cable is used to transmit DDC and HDCP data back to the source.
- Maximum range of 1640 feet (500 meters) when the source does not require HDCP. This scenario does not require the CAT-5, CAT5e or CAT-6 cable if the source does not require DDC information. If DDC is required, the use of an EDID storage device (part# EXT-DVI-EDIDN, EXT-DVI-EDIDP) can be used to transmit DDC information back to the source.
- HDMI 1.3 compliant (please see FEATURES section on page 2 for supported HDMI 1.3 features).
- HDCP compliant
- Compatible with all HDMI and DVI* displays.

NOTE: *When used with a DVI to HDMI adapter

FEATURES

Features

- Extends high definition HDMI compliant devices up to 330 feet (100 meters)
- Uses a 4 strand multi mode LC-LC fiber optic cable for HDMI and a CAT5e cable for DDC/control signals
- Extends range of HDMI by equalizing signals
- HDCP and HDMI compliant
- Supports resolutions up to 1080p, 2K, and 1920 x 1200

Supported HDMI Features:

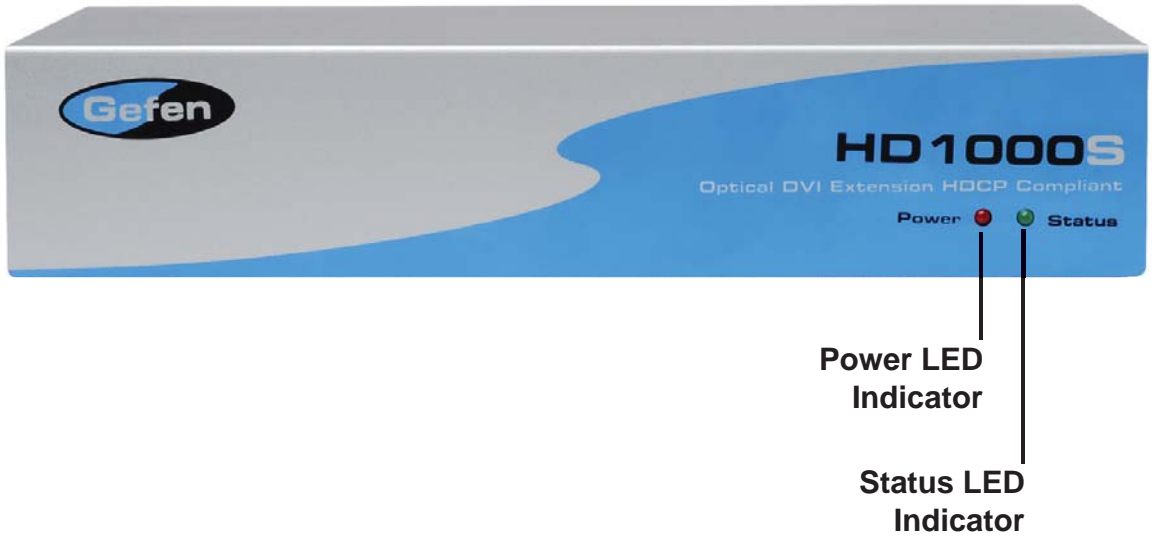
- Resolutions up to 1080P Full HD
- 12 bit Deep Color
- LCPM 7.1 Audio, Dolby® TrueHD, and DTS-HD Master Audio™
- 3DTV Pass-through
- CEC Pass-through
- Lip Sync Pass-through

Includes:

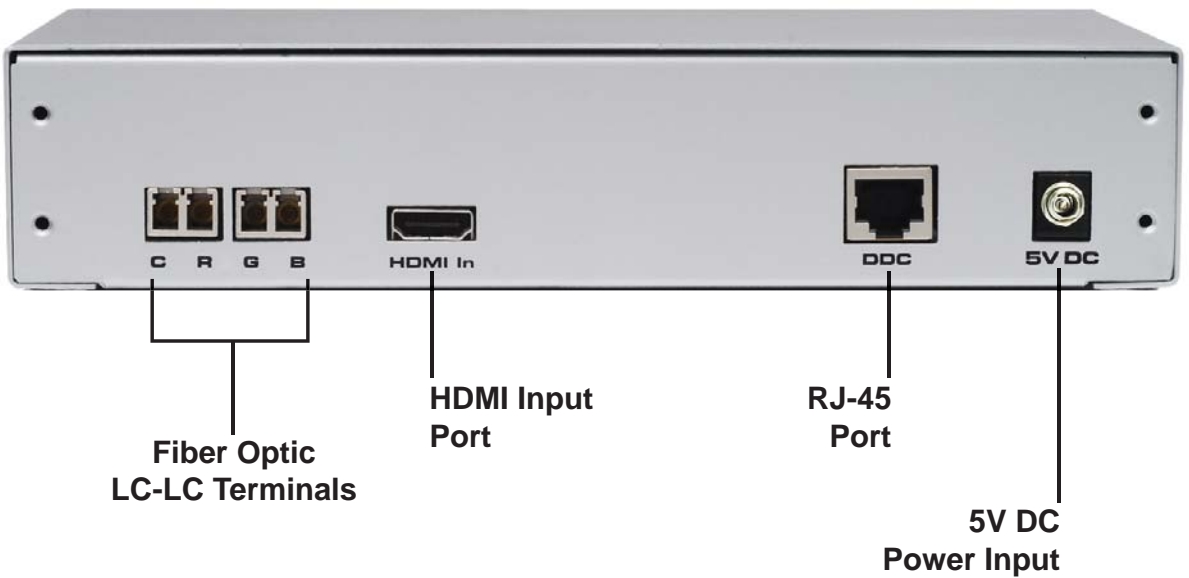
- (1) HD-1000S Sender unit
- (1) HD-1000R Receiver unit
- (2) 5V DC Power Supply
- (1) Rack Ears
- (1) 6 ft HDMI cable (M-M)
- (1) User's Manual

SENDER PANEL DESCRIPTIONS

Front Panel

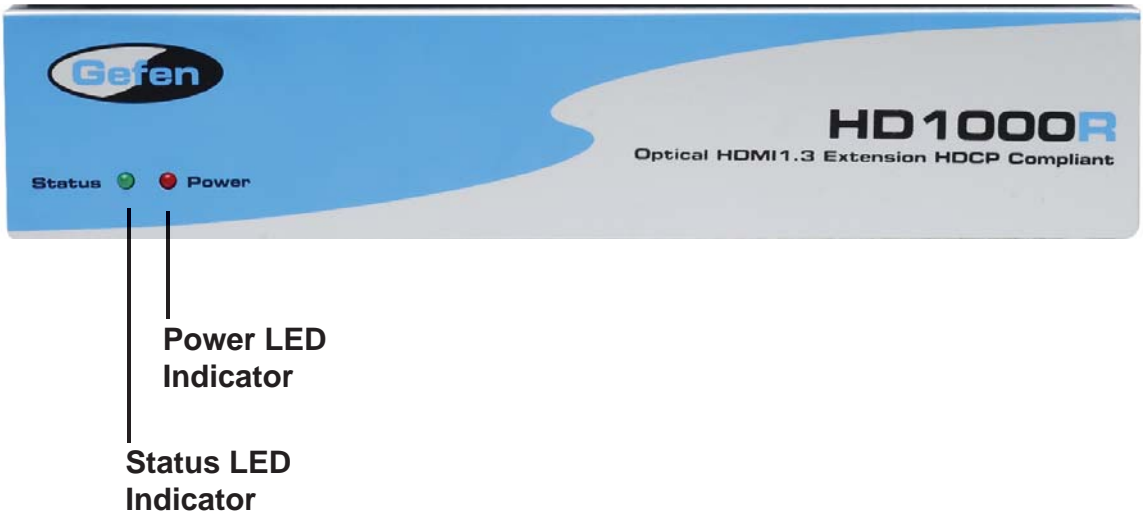


Back Panel

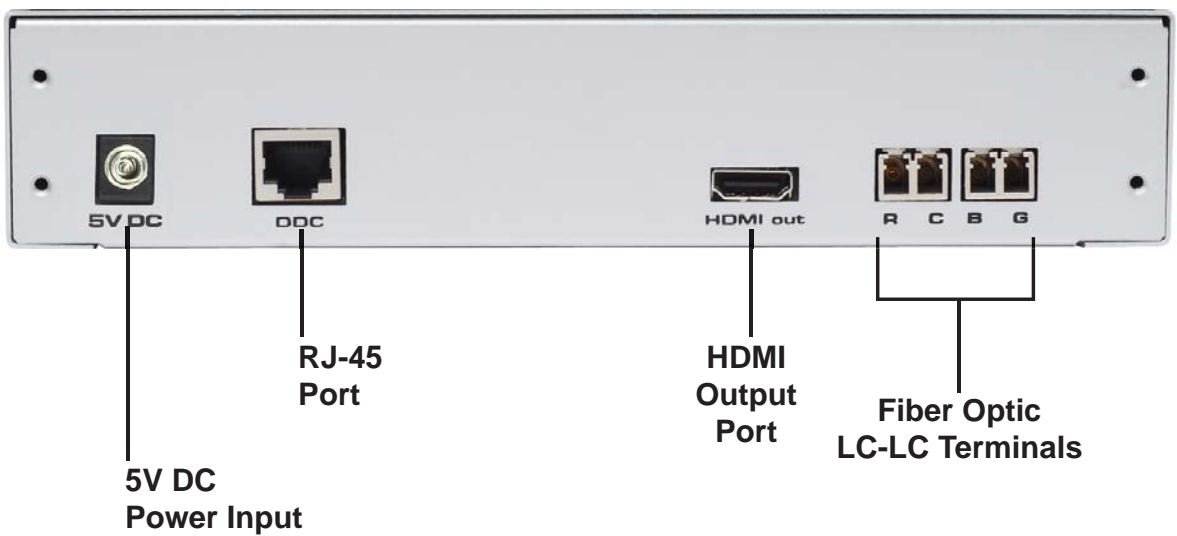


RECEIVER PANEL DESCRIPTIONS

Front Panel



Back Panel



CONNECTING AND OPERATING THE HD-1000

How To Connect The HD-1000

1. Connect the HDMI source to the HD-1000 sender unit using the supplied HDMI cable.
2. Connect a user supplied CAT-5, CAT-5e or CAT-6 cable to the sender unit.
3. Connect four user supplied multi-mode LC terminated fiber optic cables into HD-1000 sender unit.

NOTE: 50 or 62.5 micron multi-mode fiber optic cable is required for operation of the HD-1000.

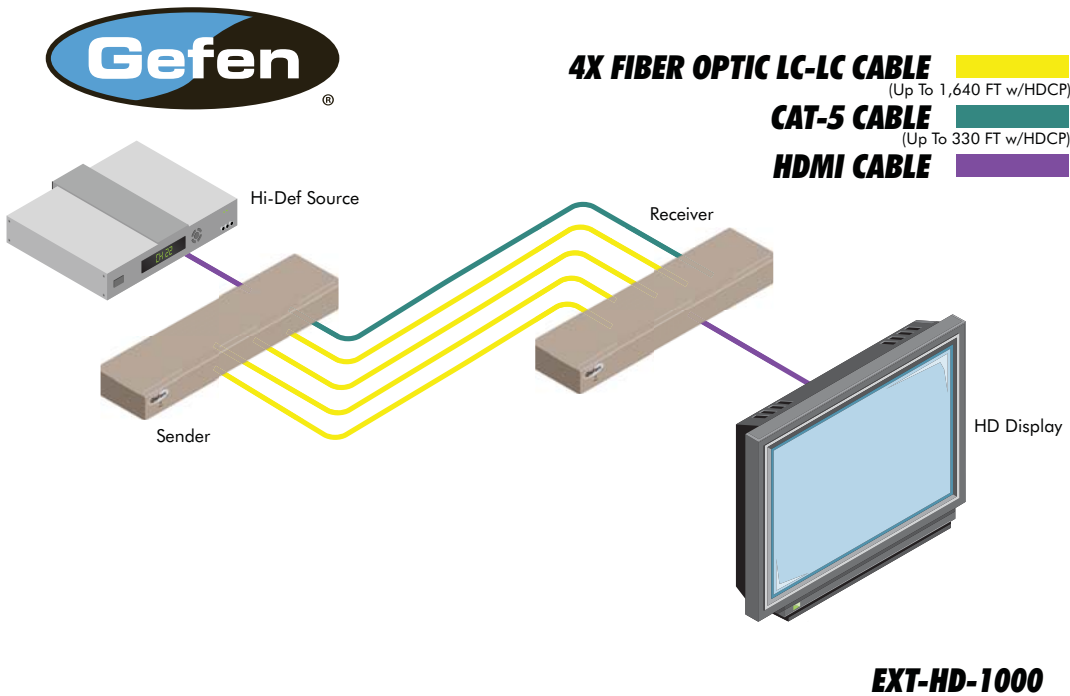
4. Connect the other end of the CAT-5, CAT-5e or CAT-6 cable into the HD-1000 receiver unit.
5. Connect the other ends of all four multi-mode LC terminated fiber optic cables into the HD-1000 receiver unit.

NOTE: Please take careful note of the labeling above each fiber optic port on both the sending and receiving HD-1000 units. The most common user error is to mis-match the fiber optic cable connections on each end, which results in no video being transmitted.

6. Connect the display to the HD-1000 receiver unit using a user supplied HDMI cable.
7. Connect the included 5V DC power supplies into both the HD-1000 sending unit and receiving units.
8. Power on the display, followed by the source.

No further adjustments are necessary to operate the HD-1000.

NETWORK CABLE WIRING DIAGRAM



Gefen has specifically engineered their products to work with the TIA/EIA-568-B specification. Please adhere to the table above when field terminating cable for use with Gefen products. Failure to do so may produce unexpected results and reduced performance.

CAT-5, CAT-5e, and CAT-6 cabling comes in stranded and solid core types. Gefen recommends using solid core cabling. CAT-6 cable is also recommended for best results.

Each cable run must be one continuous run from one end to the other. No splices or use of punch down blocks are permitted as these will cause signal degradation.

SPECIFICATIONS

Maximum Pixel Clock.....	225 MHz
Input Video Signal	1.2V p-p
Input DDC Signal	5V p-p (TTL)
Single Link Range	1080p, 2k, 1920 x 1200
HDMI Connector	Type A, 19 pin female
Video Link Connector	LC X 4
DDC Link Connector	RJ-45 Shielded
Power Supply	5V DC, Locking
Power Consumption	10W each unit (max)
Link Connectors	LC Fiber (4), Shielded RJ-45(1)
Rack mountable	1U half-rack size
Dimensions	8.5" W x 1.8" H x 4.4" D
Shipping Weight	5 lbs.

WARRANTY

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.

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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Rev X4

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This product uses UL listed power supplies.