# One (1) fiber Detachable HDMI Extender

*User's Manual for the HDFX-200-TR*

## Manual Contents


| | |
|---|---|
| Manual Contents | 1-0 |
| Welcome! Product Description | 1-1 |
| System Requirements for Setup | 1-2 |
| Installation | 1-3 |
| Troubleshooting | 1-5 |
| Maintenance, Technical Support | 1-6 |
| Product Specifications | 1-7 |
| Warranty Information | 1-8 |
| Regulatory Statements | 1-9 |


### Pictorials


| | |
|---|---|
| Figure 1 – Overall Connection of HDFX-200-TR | 1-1 |
| Figure 1 – Position of the LED | 1-3 |
| Figure 2 – Connection of optical fiber | 1-3 |
| Figure 3 – Connection of HDMI cable between Tx and HDMI source | 1-4 |
| Figure 5 – Connection of HDMI cable between Rx and display | 1-4 |

## Welcome!

Congratulations on your purchase of the one (1) fiber HDMI extender, HDFX-200-TR. This manual contains information that will assist you in installing and operating the product.

## Product Description

The HDFX-200-TR transmits WUXGA (1920x1200) at 60Hz or 1080p at 60Hz refresh ratio up to 300meters (985feet) over one (1) LC Multi-mode fiber. It has HDMI receptacle and provides intermediate cable to be connected to various types of HDMI connectors and passes CEC, EDID & HDCP (High Definition Contents Protection) for better installation flexibility. The source to Transmitter and Receiver to display device should be connected to each of them by HDMI copper cable.

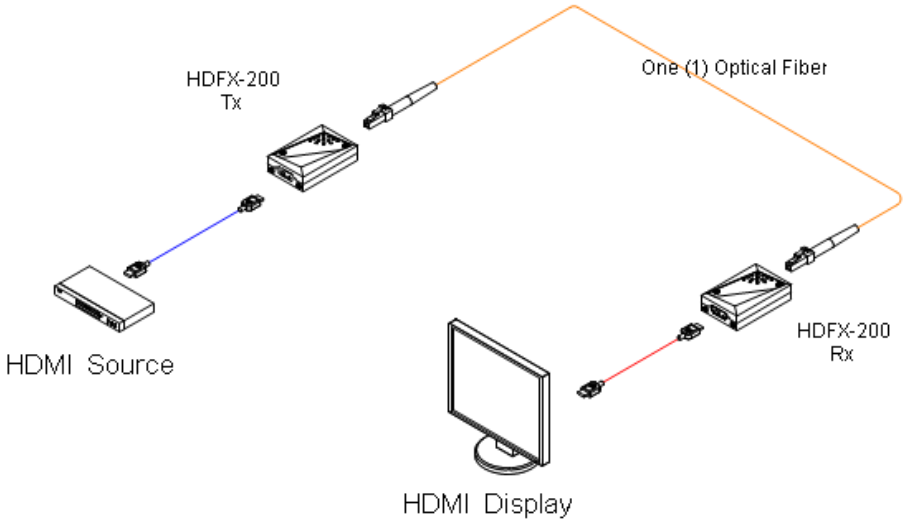


**Figure 1 – Overall Connection of Optical HDFX-200-TR**

**The Shipping Group of** HDFX-200-TR;

- ☐ One (1) Transmitter (Tx) and One (1) Receiver (Rx)
- ☐ **HDMI copper cable**: Two (2) HDMI copper cable (30cm)
- ☐ **AC/DC power adapter:** Two (2) +5V units
- ☐ **User's Manual**
- ☐ **Option Product:** LC Multi-mode fiber



## System Requirements for Setup

☐ **Hardware requirements**

- DVD, Blu-Ray or media receiver with standard HDMI ports.
- In case of using PC as a graphic source, regardless of OS version embedded HDMI ports.
- Only HDMI TVs or monitors are applicable.
- Proper initial trial of the entire platform with its application using a short length copper cable is recommended prior to install with the optical link.

☐ **Software requirements**

- No special needs, but make sure that media contents protected by HDCP should be played with HDCP certified players and TVs.

☐ **AC/DC Power Adapter Technical Advisory**

- Enclosed Power Adaptor supply power to both (Tx) and (Rx).

☐ **Connection Advisory**

- It is highly recommend that HDMI media source is directly connected into HDMI display output via HDFX-200-TR without connection to incompatible distributor, switcher and selector.

## Installation

**Important: Please keep the installation procedure below. Improper or no operation may result if the start-up sequence is not correctly followed.**

**Step 1**
Carefully unpack the contents in the shipping group.

**Step 2**
Plug the 5V power adapters to the power jack of the transmitter and receiver. Then, the LED (Green color) will begin to blink rapidly on both sides

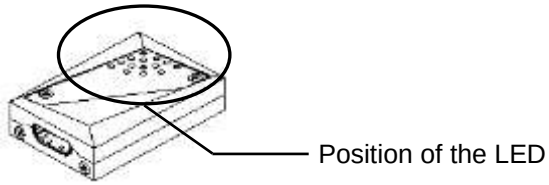


**Figure 2 – Position of the LED**

**Step 3**
Connect one (1) LC Multi-mode fiber (50um) between the transmitter and the receiver. Then, the LED Blinking will be stopped, if the connectors are fully engaged.

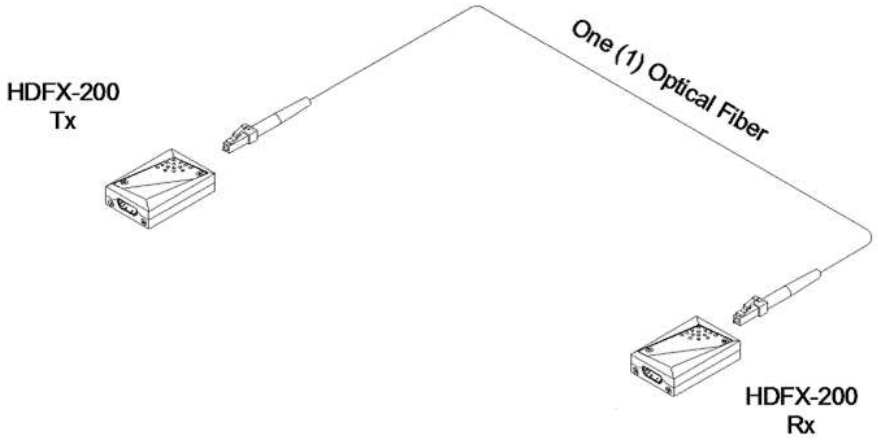


**Figure 3 – Connection of optical fiber**

**Note:** The maximum extension length by multi-mode fiber is 300m (985feet).



**Step 4**
Connect the Transmitter to the HDMI sources (DVD, media receiver) over HDMI copper cable.

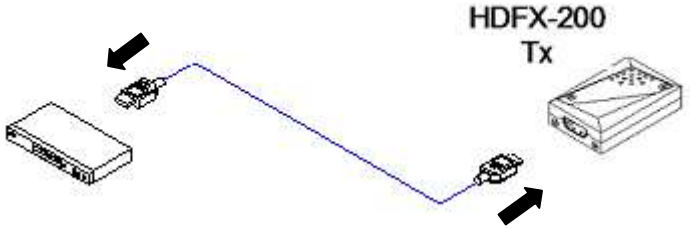


**Figure 4 – Connection of HDMI copper cable between Transmitter and media receiver**

**Step 5**
Connect the Receiver to the HDMI display over HDMI copper cable.

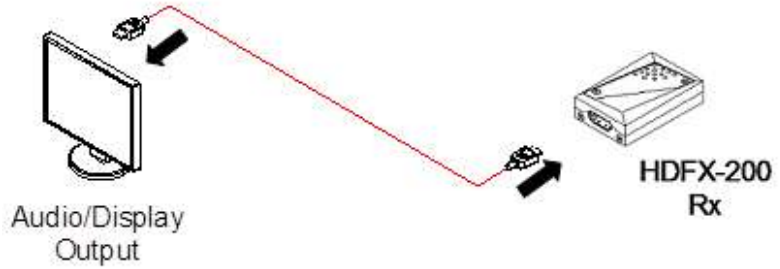


**Figure 5 – Connection of HDMI copper cable between Receiver and display**

**Step 5**
Make the source and the display power ON. And ensure that the LED in transmitter and receiver turn on.

## Troubleshooting

***The display shows only black screen.***

- Ensure that all plugs and jacks used by external power supplies (both Opticis and others) are firmly connected. Ensure that the LED ON.
- Ensure that the HDMI ports are firmly plugged in to the source and display.
- Ensure that the transmitter and receiver modules plugged correctly to the source and display, respectively.
- Check if the PC and display are powered on and properly booted.
- Reset the system by de-plugging and re-plugging the transmitter HDMI port or receiver HDMI port, or by de-plugging and re-plugging the power plugs of transmitter and receiver modules.
- Re-boot up the system while connecting the optical HDMI extension module.

***Screen is distorted or displays noises.***

- Check if the graphic resolution is properly set. Go to the display properties and tap the settings. Ensure that the resolution sets less than WUXGA (1920x1200) at 60Hz refresh ratio.
- Reset the system
- Power down, disconnect and reconnect the optical system cable or DC power adaptors, and power up



## Maintenance

No special maintenance is required for the optical system cables and power supplies. Ensure that the cables and power modules are stored or used in a benign environment free from liquid or dirt contamination.

There are no user serviceable parts. Refer all service and repair issues to Opticis or its authorized distributor.

## Technical Support and Service

For commercial or general product support, contact your reseller. For technical service, contact Opticis by email techsupp@opticis.com or visit its website at www.opticis.com.

## Product Specifications

**One (1) fiber HDMI Extender, HDFX-200-TR**

- **Compliance with HDMI standard:** supports HDMI 1.3a up to 36-bit in color depth, using fiber-optic communication link and fully function in HDCP.
- **Extension limit:**

  300 meters (985feet) for WUXGA (1920x1200) or 1080p at 60Hz refresh rate.

- **Fiber-optic Connection:** The transmitter and receiver of HDFX-200-TR have LC fiber-optic connectors and should be used with multi-mode fiber or multi mode fiber (50 ㎛)/

- **Mechanical specifications of Tx and Rx boxes**
  - **Dimensions:** 34mm / 52mm / 14.4mm (W/D/H)

- **Environmental Specifications**
  - Operating temperature: 0°C to 50°C
  - Storage temperature: -10°C to 85°C
  - Humidity: 0% to 85%

**AC/DC Power Adapter**

- **Power Input:** AC 100-240V, 50/60Hz.
- **Power Output:** +5 V, 1A SMPS DC-power Adapter
- **Cord DC Jack:** Core is + 5 V and outer is GND.
- **Certification: FCC, CE**



## Warranty Information

**1 (One) Year Warranty**

Opticis warrants this optical HDMI module to be free from defects in workman ship and materials, under normal use and service, for a period of one (1) year from the date of purchase from Opticis or its authorized resellers.

If a product does not work as warranted during the applicable warranty period, Opticis shall, at its option and expense, repair the defective product or part, d eliver to customer an equivalent product or part to replace the defective item, or refund to customer the purchase price paid for the defective product.

All products that are replaced will become the property of Opticis.

Replacement products may be new or reconditioned.

Any replaced or repaired product or part has a ninety (90) day warranty or the reminder of the initial warranty period, whichever is longer.

Opticis shall not be responsible for any software, firmware, information, or me mory data of customer contained in, stored on, or integrated with any product s returned to Opticis for repair under warranty or not.

**Warranty Limitation and Exclusion**

Opticis shall have no further obligation under the foregoing limited warranty if the product has been damaged due to abuse, misuse, neglect, accident, unusual physical or electrical stress, unauthorized modifications, tampering, alterations, or service other than by Opticis or its authorized agents, causes other than from ordinary use or failure to properly use the product in the application for which said product is intended.

**Dispose of Old Electrical & Electronic Equipment**

(Applicable in the European Union and other European countries with separate systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

## FCC/CE Statement for regulation of Electro-magnetic emission

This device complies with part 15 of FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 and 2 of FCC Rules, EN 55022/55024/61000-3 for CE certification. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and. if not installed and used in accordance with the instruction guide, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult a service representative for help.

Properly shielded and grounded cables and connectors must be used in order to comply with FCC/CE emission limits. Changes or modifications not expressly approved by the party responsible for compliance could void the user s authority to operate the equipment.

## Certification for Safety

The extension system is certified pursuant to IEC60065 and its AC/DC power adapter is certified by FCC & CE.

## Certification of Eye Safety

This laser product is inside implemented by using 850nm VCSEL (Vertical Cavity Surface Emitting Laser) Transceivers, manufactured by Opticis Co., Ltd., which are all certified by CDRH/FDA referred in Accession Number 0210774 as classified in LASER Class 1 Eye Safety.




Revision 1.0. September. , 2012

## Opticis Locations

**Headquarters**

Opticis Co., Ltd.

#907, Byucksan Technopia, 434-6
Sangdaewon-Dong, Chungwon-Gu,
Sungnam City, Gyeonggi-Do, 462-716
South Korea

Tel: +82 (31) 737-8033~8
Fax:+82 (31) 737-8079
www.opticis.com

For order support, please contact your Distributor or Reseller.

For technical support, check with the Opticis web site www.opticis.com or contact techsupp@opticis.com