

# Stretch DP-HDMI<sup>™</sup> Active Optical Cable



Doc No.: OEC-H201223-M1 / Ver 1.1

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#### Welcome!

Congratulations on your purchase of the *Stretch* DisplayPort - HDMI<sup>TM</sup> DHFC-200D, DisplayPort 1.2 to HDMI 2.0 Converting Detachable Active Optical Cable. This manual contains information that will assist you in installing and operating the product.

# **Product Description**

# **Shipping Group**

- □ DHFC-200D, DisplayPort 1.2 to HDMI 2.0 Converting Detachable Active Optical Cable: One (1) unit, length as you inquire.
- □ User Manual

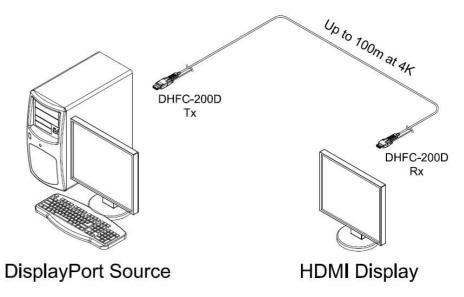


Figure 1 - General connection diagram of HDFC-200D

# **System Requirements for Setup**

#### □ Hardware requirements

- You must have a DisplayPort display source (Media player, PC or laptop). It should support the maximum graphic resolution feature of HDMI Display (TV, Monitor or Projector) to be connected.
- No special requirements memory size, CPU speed and chipsets, if you've already properly installed your DisplayPort and HDMI systems.

#### □ Software requirements

- No special restrictions, if you've already properly installed your
  HDMI systems.
- □ AC/DC Power Adapter Technical Advisory

The DHFC-200D is designed to use USB power supply on both TX(display source) and RX(display) side to power up.

Note that if either of Display source does not support DisplayPort 1.2 and/or Display does not support HDMI 2.0 standard, DHFC-200D would not transmit its signal.

Just like copper cable, transmitting information will follow lower resolution of the two.

(Example: 4K Display source – 2K Display → 2K resolution, 2K Display source – 4K Display → 2K resolution)

# <u>Warning</u>

Do not connect micro HDMI connector, which is placed at the end part of core cable, directly to any micro HDMI receptacle other than DHFC-200D body part. Using micro HDMI connector without DHFC-200D connector will cause cable and/or DisplayPort source / HDMI display devices damaged.

#### Installation

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

#### Step 1

Unpack the contents of the shipping group.

#### Step 2

Connect both the head connector and cable of DHFC-200D if they are not engaged with each other.

#### Step 3

Plug USB connector of RX side to USB port of a HDMI display and check the blue LED of RX is ON.

#### Step 4

Plug the HDMI plug of the RX side of DHFC-200D into the HDMI receptacle of HDMI Display.

#### Step 5

Plug both DisplayPort plug and USB power of TX side of DHFC-200D into the DisplayPort receptacle of DisplayPort source (Media player, PC or laptop), and check if LED of TX side is ON

#### Step 6

If the system does not work properly, go to page 1-4, trouble shooting.

<u>Note:</u> It is **NOT** recommended for customer to use any intermediate cable or adapter between them. It may deteriorate the signal transmission performance.)

**Note:** If there is no display after Step 5, kindly unplug USB cable of DHFC-200D-RX and re-plug them back to HDMI display.

<u>Note:</u> DHFC-200D has to receive +5V power from USB port for both TX/RX side to operate, however, it is mandatory to connect USB power of DPFC-200D-RX first.

# **Troubleshooting**

#### The display shows black screen.

Ensure that the both DisplayPort and HDMI ports are firmly plugged into the DisplayPort source and HDMI display. Ensure that the TX and RX modules are plugged correctly to the DisplayPort source and HDMI display respectively. Ensure that blue power LEDs on TX and RX modules are on.

Check if the DisplayPort source and display are powered on and properly booted.

Reset the system by de-plugging and re-plugging the TX DisplayPort port or RX HDMI port.

Re-boot up the system while connecting the optical cable system.

#### Screen is distorted or displays noises.

Ensure that the firm connections of both plugs while disconnecting and reconnecting the optical cable.

#### Maintenance

No special maintenance is required for the optical cable. 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.

# **Technical Support and Service**

For commercial or general product support, contact your reseller. For technical service, contact Opticis by email <a href="mailto:info@vigillink.com">info@vigillink.com</a> or visit its website at <a href="https://www.vigillink.com">www.vigillink.com</a>

# **Product Specifications**

# DHFC-200D, DisplayPort 1.2 to HDMI 2.0 Converting Detachable Active Optical Cable

- ☐ **Extends** up to 4K (4096x2160) at 60Hz (RGB & YCbCr : 4:4:4)
- □ Converts DisplayPort 1.2 signal to HDMI 2.0 signal and transmits converted signal up to 100m (328feet) over hybrid cable
- □ Adopts Plenum graded (or LSZH, Low Smoke Zero Halogen) hybrid cable
- Offers perfect flexibility during installation by separating DisplayPort and HDMI connector from cable
- Prevents accidental disconnection by using High-Retention HDMI connector(RX) and DisplayPort connector(TX)
- □ **Supports** 3D contents transmission
- □ Supports CEC, EDID and HDCP 2.2
- □ Tensile load: 150N
  - Short Term Load 300 N for 30min
  - Long Tern Load 150N for 10min
  - Minimum bending radius: 70mm(Under Load) (usually safe in assuming a minimum long-term low-stress radius not less than 15 times the cable diameter; EIA/TIA 568 For Fiber Optics
  - Outer diameter of cable: 3.9x2.7mm

# ☐ Mechanical specifications of TX and RX module parts

■ Dimensions (L/W/H):

TX: 63.0mm / 20.0mm / 11.5mm RX: 53.0mm / 20.0mm / 10.4mm

# □ Environmental Specifications

Operating temperature: 0°C to 60°C
 Storage temperature: - 20°C to 85°C

Humidity: 10% to 90%

## 1-5 Product Specifications

# **Warranty Information**

#### 1 (One) Year Warranty

Opticis warrants this optical extension cable to be free from defects in workmanship 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, deliver 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) days warranty or the reminder of the initial warranty period, whichever is longer.

Opticis shall not be responsible for any software, firmware, information, or memory data of customer contained in, stored on, or integrated with any products 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.

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# **Optolinks**

#### Headquarters

46 Corporate Park #130 Irvine, CA 92606 949-701-4742 info@vigillink.com

For order support, please contact your Distributor or Reseller.

For technical support, check with the our website <a href="www.vigillink.com">www.vigillink.com</a> or contact <a href="mailto:info@vigillink.com">info@vigillink.com</a>