

# **DIREKTRONIK**

Dataprodukter utöver det vanliga

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## **Stretch HDMI™**

*User's Manual*



# **DIREKTRONIK**

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## Welcome!

Congratulations on your purchase of the **Stretch HDMI™** Active Optical Cable for HDMI 2.0. This manual contains information that will assist you in installing and operating the product.

## Product Description

### Shipping Group

- Active Optical Cable:** One (1) unit, length as your inquire.
- User's Manual**

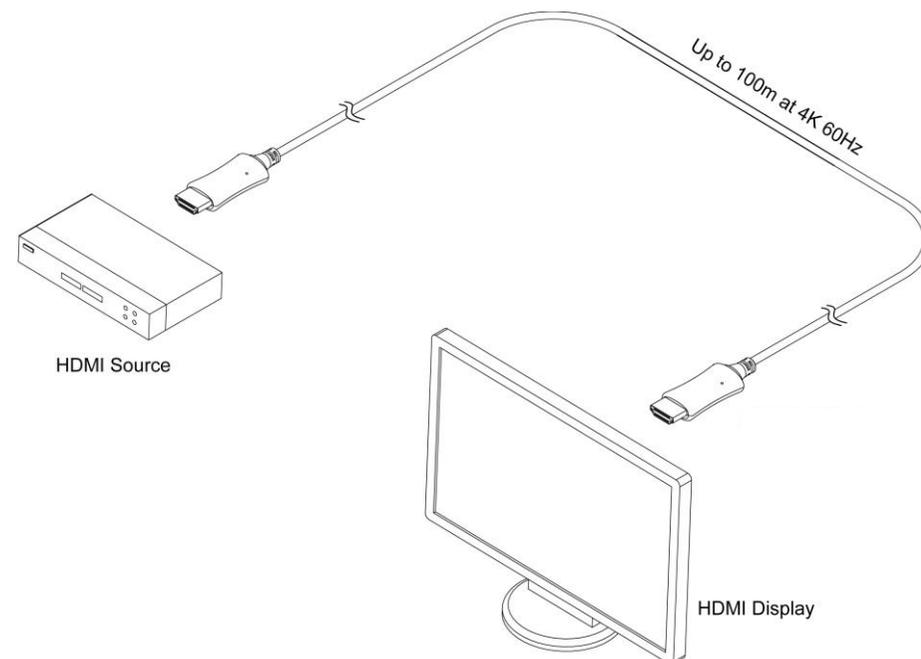


Figure 1 – General connection diagram

## System Requirements for Setup

### □ Hardware requirements

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

### □ Software requirements

- No special restrictions, if you've already properly installed your HDMI / DVI systems.

### □ AC/DC Power Adapter Technical Advisory

designed to use +5V internal power supplied through a HDMI pin (#18) on the graphic source port.

**Note that if either of Display source or Display does not support HDMI 2.0 standard, | would not transmit HDMI 2.0 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)**

## 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

Carefully unpack the contents of the shipping group.

### Step 2

Plug directly the HDMI plug of the Tx side into the HDMI receptacle of HDMI source (Media player, PC or laptop) without power up of the devices. Opticis does **NOT** recommend customer to use any intermediate cable or adapter between them. It may deteriorate the signal transmission performance.

### Step 3

Plug the HDMI plug of the Rx side into the HDMI receptacle of a HDMI Display. Opticis does **NOT** recommend customer to use any intermediate cable or adapter between them. It may deteriorate the signal transmission performance.

### Step 4

Power ON the device of a HDMI source and a Display and check the blue power LED on Tx and Rx ON.

### Step 5

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

**Note:** HDFC-200P can utilize either the +5V power supplied through a HDMI pin (#18) from the HDMI source or the +5V power adaptor. Nonetheless, you have to confirm the power being capable to supply more than 500mA.

**Note:** Many HDMI sources should be able to supply sufficiently DC power to operate

## Troubleshooting

### ***The display displays only black screen.***

Ensure that the HDMI ports are firmly plugged in to the HDMI source and display. Ensure that the Tx and Rx module plugged correctly to the HDMI source and display respectively. Ensure that blue power LEDs on Tx and Rx modules are on.

Check if the HDMI source and display are powered on and properly booted. Reset the system by de-plugging and re-plugging the Tx HDMI port or Rx HDMI port.

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

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

Ensure connections of both plugs while disconnecting and reconnecting the optical HDMI cables.

## Maintenance

No special maintenance is required for the optical HDMI cables. 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

## Technical Support and Service

Tel: 08-52400700, Email: support@direktronik.se

## Product Specifications

### HDMI 2.0 Active Optical Cable

- **Supports HDMI 2.0 Standards**
- **Extends** up to 4K (4096x2160) at 60Hz (RGB & YCbCr : 4:4:4)
- **Transmits** HDMI 2.0 data up to 100m(328feet) over hybrid cable
- **Adopts** plenum graded & LSZH (Low Smoke Zero Halogen) hybrid cable
- **Operated** by HDMI source without external power
- **Supports** 3D contents transmission
- **Complies** with CEC, EDID and HDCP 2.2
- **Supports** HDR at 10 bit or 12 bit speeds respectively within its maximum bandwidth, 18Gbps
  
- Tensile load: 250N
  - Minimum bending radius: 8mm  
(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:** 19.6mm / 11.5mm / 42.6mm (W/H/D)
  
- **Environmental Specifications**
  - Operating temperature: 0°C to 50°C
  - Storage temperature: - 20°C to 85°C
  - Humidity: 10% to 90%
  
- **Certifications: CE / FCC**

## Warranty Information

### 1 (One) Year Warranty

Opticis warrants this optical HDMI 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 remainder 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.