

Stretch DisplayPort[™]



User Manual DPFC-200D

Doc No.: OE-H210222-01 / Rev1.2

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Welcome!

Congratulations on your purchase of the *Stretch* DisplayPort[™] DPFC-200D, Detachable Active Optical Cable for DisplayPort 1.2. This manual contains information that will assist you in installing and operating the product.

Product Description

Shipping Group

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

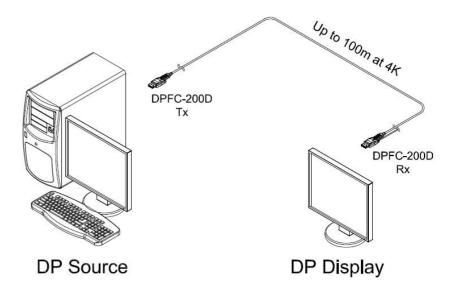


Figure 1 – General connection diagram of DPFC-200D

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 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 systems.

□ Software requirements

No special restrictions, if you've already properly installed your
DisplayPort systems.

AC/DC Power Adapter Technical Advisory

The DPFC-200D is designed to use +5V internal power supplied through a DisplayPort pin (#20) on the graphic source port and display.

Note that if either of Display source or Display does not support DisplayPort 1.2 standard, DPFC-200D would not transmit DisplayPort 1.2 signal.

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

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

Warning

Do not connect micro HDMI connector, which is place on the end part of core cable, directly to any micro HDMI receptacle other than DPFC-200D body part. Using micro HDMI connector without DPFC-200D connector will damage cable and/or DisplayPort devices.

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 connector and cable of DPFC-200D if they are not engaged with each other.

Step 3

Directly plug the TX side of DPFC-200D into the DisplayPort receptacle of DisplayPort source (Media player, PC or laptop) and check if the LED of TX side is ON.

Step 4

Directly plug the RX side of DPFC-200D into the DisplayPort receptacle of a Display.

Step 5

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

<u>Note:</u> Opticis does **NOT** recommend customer to use any intermediate cable or adapter between them. It may deteriorate the signal transmission performance.

<u>Note:</u> DPFC-200D can utilize the +5V power supplied through a DisplayPort pin (#20) from the DisplayPort source or Display. Nonetheless, you have to confirm that the power is capable to supply more than 500mA. If DisplayPort source and/or display cannot supply enough power, you can make a customized order of DPFC-200D with USB power cable on either or both TX/RX side for supplying external power (optional).

Note: Many DisplayPort sources are able to supply sufficiently DC power to operate DPFC-200D on TX side.

Troubleshooting

The display shows black screen.

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

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

Screen is distorted or displays noises.

Ensure connections of both modules' power plugs while disconnecting and reconnecting the optical DisplayPort cables.

Maintenance

No special maintenance is required for the optical DisplayPort 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 Opticis.

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 our website at www.opticis.com

Certification of Eye Safety

This laser product is manufactured by Opticis Co., Ltd., which are all certified in Laser Class 1 (IEC60825-1).

Any modification of this product is not allowed without authorization of the manufacturer. Do not cut any part of cable for safety purposes.

CLASS 1 LASER PRODUCT

Caution – Use of controls or adjustments or performances of procedures other than those specified herein may result in hazardous radiation exposure.

1-4 Troubleshooting, Maintenance, Technical Support

Product Specifications

DPFC-200D, DisplayPort 1.2 Detachable Active Optical Cable

Support DisplayPort 1.2 Standards
Extends up to 4K (4096x2160) at 60Hz (RGB & YCbCr : 4:4:4)
Transmits DisplayPort 1.2 data up to 100m(328feet) over hybrid cable
Adopts Plenum graded & LSZH (Low Smoke Zero Halogen) hybrid cable
Offers perfect flexibility during installation by separating DisplayPort connector from cable
Supports Multi-Stream Transport

- □ Tensile load: 150N
 - Short Term Load 300 N for 30min
 - Long Tern Load 150N for 10min

Operates without external power

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

Provides USB power cable on both display source(TX) and

■ Outer diameter of cable: 3.9x2.7mm

□ Mechanical specifications of TX and RX module parts

display(RX) side for insufficient power supply(optional)

■ **Dimensions:** 55.0mm / 20.0mm / 11.5mm (L/W/H)

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 DisplayPort 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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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

1-6 Warranty Information