Stretch DisplayPort^{TM}
DisplayPort 1.4
pure optical extender
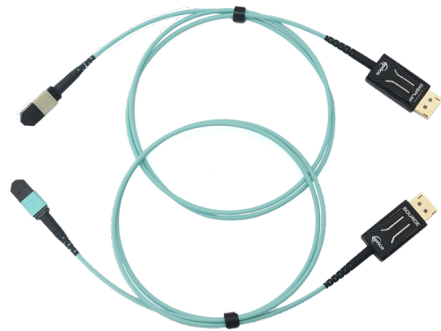
User Manual
DPC-MP14-TR

Manual Contents

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Welcome!

Congratulations on your purchase of the DisplayPort1.4 MPO pure optical extender, DPC-MP14-TR! This manual contains information that will assist you in installing and operating the product.

Product Description

Shipping Group

☐ **DPC-MP14-TR, DisplayPort 1.4 MPO pure optical extender:** One (1) set, DPC-MP14-TX(Transmitter) and DPC-MP14-RX(Receiver)

☐ **Two (2) MPO adapters**

☐ **Two (2) MPO caps**

☐ **(Optional) Cord safety cover**

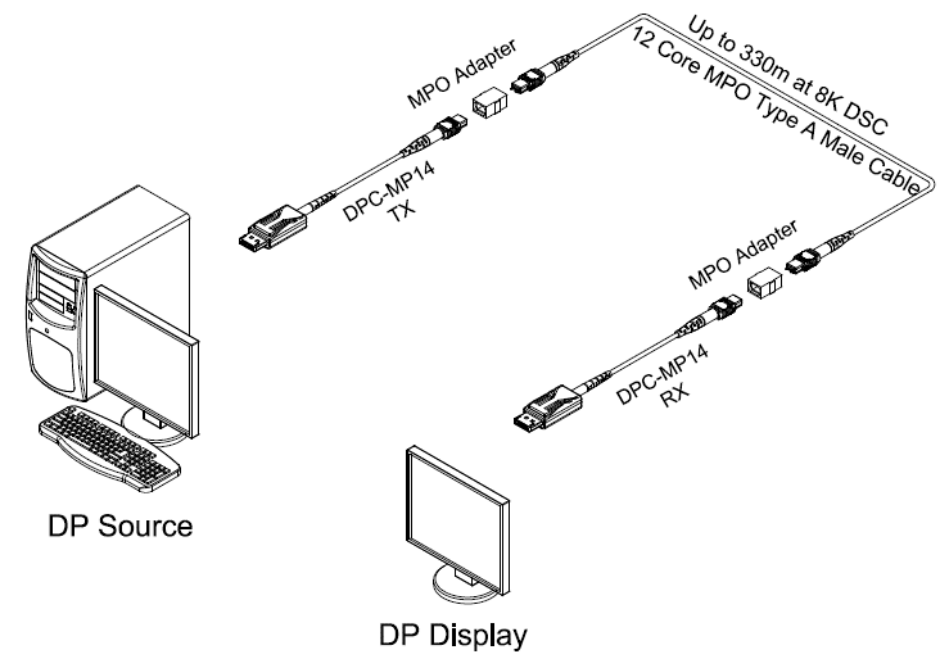   ***** Contact the regional sales representative or info@vigillink.com for more information.

Figure 1 – General connection diagram of DPC-MP14-TR

System Requirements for Setup

- □ **Hardware requirements**

  - ■ You may have a DisplayPort 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 for memory size, CPU speed and chipsets, if you've already properly installed your DisplayPort systems.

  - ■ DPC-MP14-TR is designed to use +3.3V internal power supplied through a DisplayPort pin (#20). Not only Source (PC) but also Sink (Display) devices must provide power to DPC-MP14-TR.

- □ **Software requirements**

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

Note that if either of source or display does not support DisplayPort 1.4 standard, DPC-MP14-TR would not transmit DisplayPort 1.4 signal.

As with a copper cable, transmitting information will follow lower resolution among the two.
(Example: 4K/8K Display source – 2K Display → 2K resolution, 2K Display source – 4K/8K 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
Directly plug the DPC-MP14 Transmitter that connected to the adapter to the DisplayPort receptacle of DisplayPort source (PC).

Step 3
Plug the transmitter plugged into the source into the adapter and connect the MPO cable into the other side of adapter.

Step 4
Directly plug the DPC-MP14 Receiver that connected to the adapter to the DisplayPort receptacle of a Display.

Step 5
Plug the receiver plugged into the display into the new adapter, and then connect in the MPO cable on the other side that is not yet connected.

Step 6
If the system does not work properly, go to page 1-4, trouble shooting.

Note 1: DPC-MP14-TR is designed to use 12 core multi-mode OM3 Type A male-to-male MPO cable.

Note 2: DPC-MP14-TR requires to use MPO adapters (Type A, B or C) in between TX/RX and MPO cable. Adapter was designed to provide alignment between female-to-male MPO connector and MPO cable.

Note 3: For DPC-MP14-TR, the procedure of connecting TX, RX, adapter, and MPO cable is irrelevant.

Note 4: Cord safety covers will be provided as an option to protect disconnection by external pulling force. Contact the regional sales representative or info@vigillink.com for more information.

*This cord safety cover only be fitted with an adapter provided by Opticis only.

Troubleshooting

The display shows black screen.
Ensure that the DisplayPort connector ports are firmly plugged into the DisplayPort source and display. Ensure that the Transmitter and Receiver are plugged correctly to the DisplayPort source and display respectively.

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.

DPC-MP14-TR requires to use 12 core multi-mode OM3 Type A male-to-male MPO cable. It is not allowed to use with 8 core or 24 core MPO cable.

Ensure that source and display provide enough power to DPC-MP14-TR. The DisplayPort standard requires that at least 1.5 watt of power be supplied by DisplayPort pin #20, and use in non-compliant environment may be restricted.

Screen is distorted or displays noises.
Ensure connections of both plug while disconnecting and reconnecting the optical DisplayPort cables.

Maintenance

Ensure that the Transmitter and Receiver are stored or used in a benign environment free from liquid or dirt contamination.

DPC-MP14-TR will be provided with MPO caps. It protects MPO cable connectors from contaminates and damage. Whenever a MPO cable is not plugged in, it should always have a MPO cap protecting each connector.

Be caution of partial bending of boots(neck) when using cables. If the cable is bent too much, the cable will be damaged and not work.

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 us by email info@vigillink.com or visit our website at www.vigillink.com

Product Specifications

DPC-MP14-TR, DisplayPort 1.4 MPO Pure Optical Extender

- ☐ **Extends** up to 8K DSC(7680x4320) at 60Hz

- ☐ **Transmits** DisplayPort data up to 330m(1,082feet) over MPO cable(OM3)

- ☐ **Supports** up to 32.4Gbps bandwidth with 8.1Gbps per lane(HBR3)

- ☐ **Designed** as pigtail type for easy installation

- ☐ **Different** color of MPO connectors: TX (Aqua) & RX (Beige)

- ☐ **Operates** in a wide range of operating temperature from - 10°C to 60°C

- ☐ **Provides** immersive Multi-channel Audio, Dolby true-HD, DTS-HD Master Audio for theater-quality sound

- ☐ **Data** security with negligible EMI emission

- ☐ Cable Tensile load: 60N
  - ■ Minimum bending radius:
    LSZH: 30mm
  - ■ Outer diameter of cable
    LSZH: 3.0mm (±0.2)

- ☐ Physical Characteristic
  - ■ Dimensions**:** 21mm / 37mm / 11mm (W/L/H)

- ☐ Operating Condition
  - ■ Operating temperature: - 10°C to 60°C
  - ■ Storage temperature: - 20°C to 70°C
  - ■ Humidity: 5% to 95%

Warranty Information

1 (One) Year Warranty

Opticis warrants this optical DisplayPort extender 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 our website www.vigillink.com or contact info@vigillink.com