Stretch DisplayPort^{TM}
DisplayPort 1.4
Active Optical Cable

User Manual
DPOC-14N

Manual Contents

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Welcome!

Congratulations on your purchase of the DisplayPort1.4 Active Optical Cable, DPOC-14N! This manual contains information that will assist you in installing and operating the product.

Product Description

Shipping Group

☐ **DPOC-14N, DisplayPort 1.4 Active Optical Cable:** One (1) unit, length as you inquire.
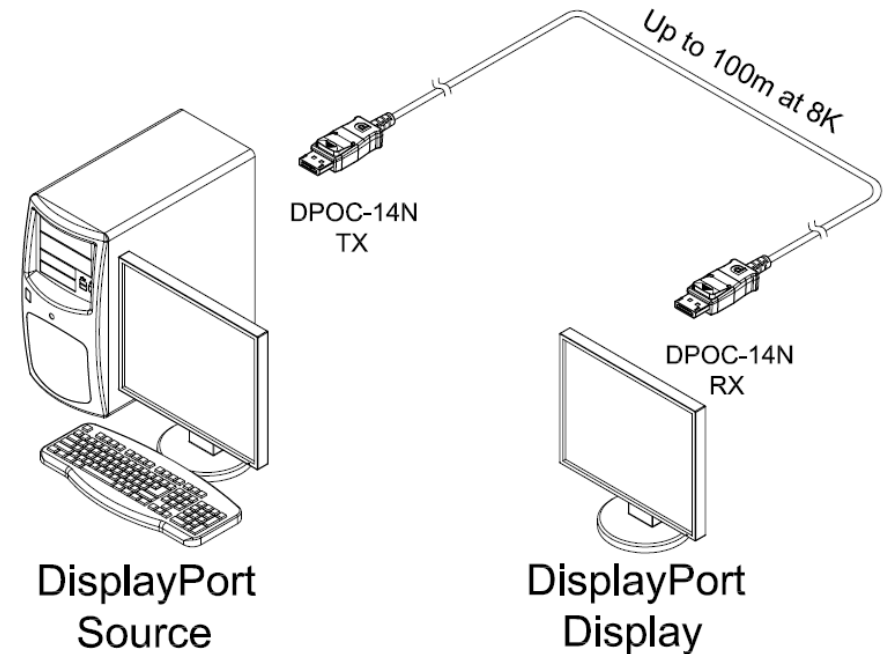
☐ **User Manual**

Figure 1 – General connection diagram of DPOC-14N

System Requirements for Setup

☐ **Hardware requirements**

■ You may 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 for 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 DPOC-14N is designed to use +3.3V internal power supplied through a DisplayPort pin (#20) on the graphic source port. DisplayPort pin (#20) is powered by TX(source) and RX(display) is not.

Note that if either of Display source or Display does not support DisplayPort 1.4 standard, DPOC-14N would not transmit DisplayPort 1.4 signal.
Just like 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 TX side of DPOC-14N into the DisplayPort receptacle of DisplayPort source (Media player, PC or laptop) without external power.

Step 3
Directly plug the RX side of DPOC-14N into the DisplayPort receptacle of a Display.

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

Note: Opticis does **NOT** recommend customer to use any intermediate cable or adapter with DPOC-14N. It may deteriorate the signal transmission performance.

Note: DPOC-14N can utilize the +3.3V power supplied through a DisplayPort pin (#20) from the DisplayPort source.

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.

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 plugs while disconnecting and reconnecting the optical DisplayPort cables.

Maintenance

Ensure that the cables and power modules are stored or used in a benign environment free from liquid or dirt contamination.

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 Opticis by email info@vigillink.com or visit its website at www.vigillink.com

Product Specifications

DPOC-14N, DisplayPort 1.4 Active Optical Cable

☐ **Support** DisplayPort 1.4 Standards

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

☐ **Transmits** DisplayPort data up to 100m (328feet) over hybrid cable

☐ **Supports** up to 32.4Gbps data rate with 8.1Gbps/lane(HBR3)

☐ **Offers** different jacket type of cables as Plenum or LSZH or TPU

☐ **Plug and Play**

☐ **Operates** without external power

☐ Bi-directional hardware handshake with voltage assertion for DPCP, EDID

☐ Multi-channel Audio, Dolby true-HD, DTS-HD Master Audio

☐ Cable Tensile load: 100N
  - Minimum bending radius:
    Plenum/LSZH: 6mm
    TPU: 9mm
  - Outer diameter of cable
    Plenum/LSZH: 3.4mm (±0.2)
    TPU: 4.5mm (±0.3)

☐ Mechanical specifications of TX and RX module parts
  - Dimensions**:** 47.8mm / 20mm / 12.7mm (L/W/H)

☐ Environmental Specifications
  - Operating temperature: 0°C to 50°C
  - Storage temperature: - 30°C to 70°C
  - Humidity: 5% to 85%

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 our website www.vigillink.com or contact info@vigillink.com