



## **Stretch DVI™**



### *User Manual DVFC-100*

## Manual Contents

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## Welcome!

Congratulations on your purchase of the **Stretch DVI™** DVFC-100, Active Optical Cable for DVI. This manual contains information that will assist you in installing and operating the product.

## Product Description

### Shipping Group

- **DVFC-100, Active Optical Cable:** One (1) unit, length as you inquire.
- **User Manual**

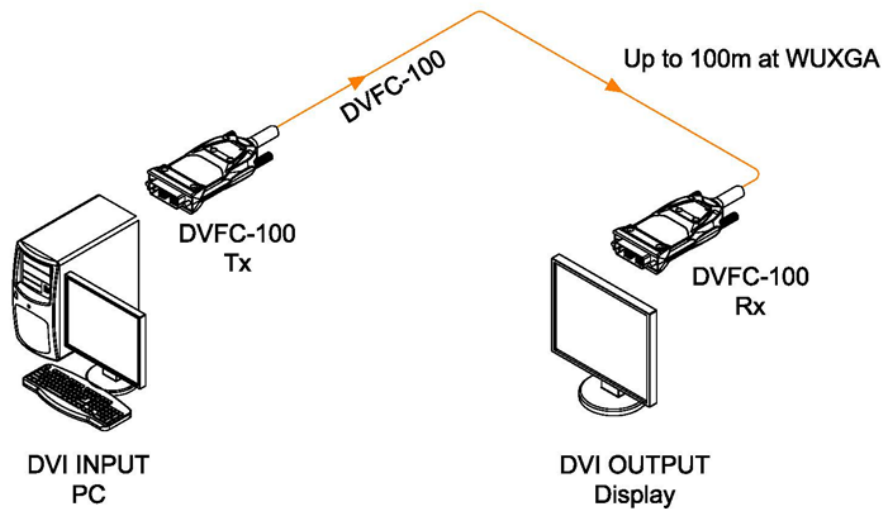


Figure 1 – General connection diagram of DVFC-100

## System Requirements for Setup

- **Hardware requirements**
  - You must have a DVI graphic card or controller having a DVI port in your PC, SUN or MAC systems. It should support the maximum graphic resolution feature of displays to be connected.
  - No special requirements for memory size, CPU speed and chipsets, if you've already properly installed your DVI graphic cards or controllers.
- **Software requirements**
  - No special restrictions, if you've already properly installed your DVI / HDMI systems.
- **AC/DC Power Adapter Technical Advisory**

**The DVFC-100 is designed to use +5V internal power supplied through a DVI pin (#14) from the graphic source port. To plug the TX module into DVI source makes the RX module supplied over a copper wire of the hybrid cable.**

## Installation

**Important: Please use the installation procedure below. Failure in operation may result if the start-up sequence is not correctly followed.**

### Step 1

Carefully unpack the contents of the shipping group.

### Step 2

Insert the DVI plug of the DVFC-100-TX into the DVI receptacle of DVI source (PC graphic card etc.) without powering on the display devices. Do **NOT** recommend to use any intermediate cable or adapter between them. It may deteriorate the signal transmission performance.

### Step 3

Insert the DVI plug of the DVFC-100-RX into the DVI receptacle of a graphic source. Do **NOT** recommend to use any intermediate cable or adapter between them. It may deteriorate the signal transmission performance.

### Step 4

Power ON the device for the DVI source and the display and check if the blue LED is on for the TX and RX.

### Step 5

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

**Note:** DVFC-100 can utilize either +5V power supplied through the DVI pin (#14) from the DVI source or +5V power adaptor. Nonetheless, you have to confirm that the power is capable to supply more than 500mA.

**Note:** Many DVI sources are able to supply sufficiently DC power to operate DVFC-100.

## 1-3 Installation

## Troubleshooting

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

Ensure that the DVI ports are firmly plugged into the DVI source and display. Ensure that the TX and RX modules are plugged correctly to the DVI source and display respectively. Ensure that blue power LED on TX and RX module are live.

Check if the DVI source and display are powered on and properly booted. Reset the system by de-plugging and re-plugging the TX DVI port or RX DVI port. Re-boot up the system while connecting the optical DVI cable system.

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

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

## Maintenance

No special maintenance is required for the optical DVI cables. Ensure that the cables and power modules are stored or used in a benign environment free from the 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](mailto:techsupp@opticis.com) or visit its website at [www.opticis.com](http://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.



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

### DVFC-100 Optical DVI Extension Cable

- **Compliance with DVI standard:** support DVI and HDMI1.4 with 36-bit color depth, fully implemented by fiber-optic communication.
- **Extension limit:** 100m (328feet) for WUXGA (1920x1200) @60Hz or 1080p @60Hz (36bit). (4K 30Hz support)
- **Graphic Transmission Bandwidth:** 3.4Gbps bandwidth per graphic channel.
- **Hybrid Fiber-optic Cable:** Flame retardant PVC employing 4 fiber strands and 6 shielded copper wires.
- Tensile load: 196N
  - Minimum bending radius: 78mm  
(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: 5.2mm
- **Mechanical specifications of Tx and Rx module parts**
  - **Dimensions:** 39mm / 14.6mm / 68mm (W/H/D)
- **Environmental Specifications**
  - Operating temperature: 0°C to 50°C
  - Storage temperature: - 30°C to 70°C
  - Humidity: 10% to 90%
- **Certifications: CE / FCC**

## Warranty Information

### 1 (One) Year Warranty

Opticis warrants this optical DVI 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) day 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.

## Opticis Locations

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[www.opticis.com](http://www.opticis.com)

For order support, please contact your Distributor or Reseller.

For technical support, check with the Opticis web site [www.opticis.com](http://www.opticis.com) or contact [techsupp@opticis.com](mailto:techsupp@opticis.com)