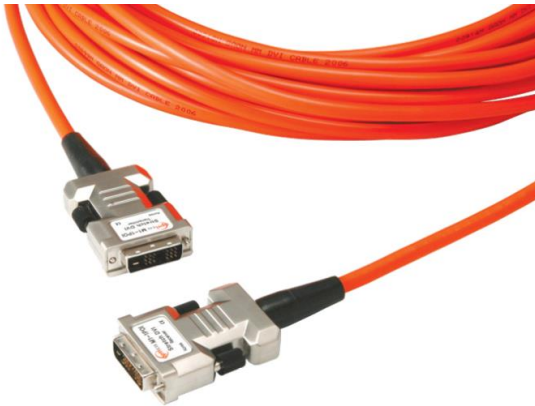




Stretch DV™ **Point to Point Cable**



User Manual
M1-1P0E

Manual Contents

Manual Contents	1-0
Welcome!, Product Description	1-1
System Requirements for Setup	1-2
Installation	1-3
Troubleshooting, Maintenance, Technical Support	1-5
Product Specifications	1-6
Warranty Information	1-7

Pictorials

Figure 1 – Optical DVI Cable, M1-1P0E	1-1	
Figure 2 – TX Module of M1-1P0E Cable	1-3	1-3
Figure 3 – RX Module of M1-1P0E Cable	1-3	
Figure 4 – Connection of AC/DC Power Adaptor	1-4	

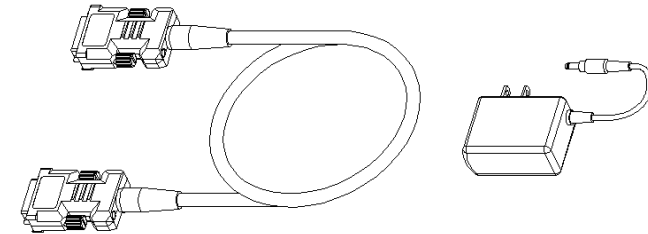
Welcome!

Congratulations on your purchase of the **Stretch DVI™** M1-1P0E Optical DVI (Digital Visual Interface) Extension Cable. This manual contains information that will assist you in installing and operating the product.

Product Description

Shipping Group

- M1-1P0E Optical DVI Cable:** One (1) unit
- +5V AC/DC power adaptor:** One (1) unit
- User Manual**



M1-1P0E model and +5V AC/DC power adaptor

Figure 1 – Optical DVI Cable, M1-1P0E

System Requirements for Setup

□ Hardware requirements

- You must have a DVI graphic controller or card 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 memory size, CPU speed and chipsets, if you've already properly installed your DVI graphic controllers or cards.

□ Software requirements

- No special restrictions, if you've already properly installed your DVI graphic controller in your OS.

□ AC/DC Power Adapter Technical Advisory

The M1-1P0E is designed to use +5V internal power supplied through a DVI pin (#14) from the graphic card.

However, the M1-1P0E requires one external +5V AC/DC power adaptor to drive the TX/RX modules if the power supplied from the graphic card is not enough to operate the M1-1P0E. To plug the power into one of two modules (TX and RX) makes the other supplied over the hybrid cable.

Tips: In general, most of the laptops are not capable to supply sufficiently DC powers for two modules.

Tips: In general, most of laptops or desktop PCs with PCI Express graphic card require using an AC/DC power adaptor.

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 module of M1-1P0E in the DVI receptacle of PC. Do **NOT** use any intermediate cable or adapter between them.

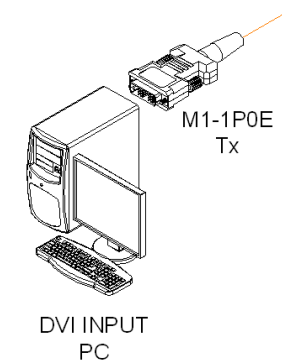


Figure 2 – TX Module of M1-1P0E Cable

Note: M1-1P0E normally uses the power +5V supplied through a DVI pin (#14) from the graphic cards. After completing the installation instruction, if the system doesn't work properly, you have to confirm the power capacity which supplies more than 500mA.

Step 3

Plug the RX module of M1-1P0E in the DVI receptacle of display. Do **NOT** use any intermediate cable or adapter between them.

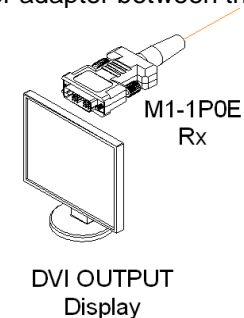


Figure 3 – RX Module of M1-1P0E Cable

Step 4

Turn the power on of the PC and display.

Note: You can replace any DVI cable or an M1-1P0E into another M1-1P0E by following the **Step1** to **3**, while all powers of PC and display are ON.

Step 6

You can see processing of the system to boot-up. Installation process is finished when the display operates normally.

Step 7

If you can't get the picture on display, connect an AC/DC power adaptor to either TX or RX module of M1-1P0E. Then, follow the **Step2** to **Step6**.

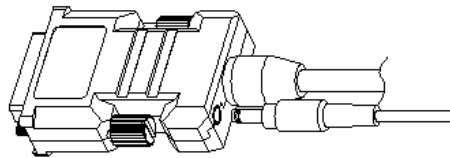


Figure 4 – Connection of AC/DC Power Adaptor

Tips: In general, most of laptops are not capable to supply sufficiently DC powers for two modules.

Tips: In general, most of laptops or desktop PCs with PCI Express graphic card require using an AC/DC power adaptor.

Troubleshooting

The display shows black screen.

Ensure that all AC and DC plugs and jacks used by external power supplies (both Opticis and others) are firmly connected.

Ensure that the DVI ports are firmly plugged into the PC and display. Ensure that the TX and RX modules are plugged correctly to the PC and display, respectively.

Check if the PC 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, or by de-plugging and re-plugging the power cord plugs of TX and RX modules.

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

Screen is distorted or displays noises.

Check if the graphic resolution is properly set. Go to the display properties of Windows and tap the settings. Ensure that the resolution sets less than WUXGA (1900x1200) at 60Hz refresh ratio.

Reset the system. Disconnect and reconnect the optical DVI cables or DC power adapters.

Maintenance

No special maintenance is required for the optical DVI cables and power supplies. 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 its website at www.opticis.com

Product Specifications

M1-1P0E Optical DVI Extension Cable

- **Compliance with DVI standard:** support DVI1.0 and DDC2B, fully implemented by fiber-optic communication.
- **Extension limit:** 2K resolution at 60Hz and 1080p up to 100m (328feet).
- **Graphic Transmission Bandwidth:** support WUXGA at 60Hz, or 1.65Gbps bandwidth per graphic channel.
- **Hybrid Fiber-optic (H-PCF) Cable:** Riser Jacket of retardant PVC employing 4 strands H-PCF (Hard Polymer Cladding Fiber) having 200/225µm core/clad.
 - Tensile load: 180N
 - Minimum bend radius: 25mm
 - Outer diameter of cable: 7.2mm
- **Mechanical specifications of TX and RX modules**
 - **Dimensions (WDH):** 29 x 53 x 15mm
 - **Clamping strength to cable:** 14kgf
- **Environmental Specifications**
 - Operating temperature: 0°C to 50°C
 - Storage temperature: - 30°C to 70°C
 - Humidity: 10% to 85%
- **Certifications:** CE / FCC

AC/DC Power Adapter

- **Power Input:** AC 100-240V, 50/60Hz 0.1A
- **Power Output:** +5 V, 600 mA SMPS DC-power Adapter
- **Cord DC Jack:** Core is 5 V and outer is GND.

1-6 Product Specifications

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.

1-7 Warranty Information

Opticis Locations

OPTICIS HQ

Opticis Co., Ltd.

3F, 305, Sanseong-daero

Sujeong-gu, Seongnam-si

Gyeonggi-do, 13354

South Korea

Tel: +82 (31) 719-8033

Fax: +82 (31) 719-8032

www.opticis.com

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