

# DVI Fiber Optic Extender Kit (Multi-mode LC type)

ET-DF0101-TG500  
ET-DF0101-RG500

## User Manual

◀ V1.0 ▶



**DataBay**

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## Optical DVI Extender user's manual

Thank you for your purchase of the DataBay Optical DVI (Digital Visual Interface) Extender. You now have a high quality and durable device to extend high resolution content with the highest quality to 500 meters. This manual contains will assist you in installing and operating the product.

### Product Description

#### Shipping Group

- **ET-DF0101-MG500 :**  
One (ET-DF0101-TG500) unit of Transmitter  
One (ET-DF0101-RG500) unit of Receiver.
- **+5V AC/DC power adaptor:**  
Two power adapter with input 100~240V.
- **User's Manual**



**Figure 1** ET-DF0101-MG500 Transmitter and Receiver



**Figure 2** +5V AC/DC power adaptor (100~240V, 1A)

## **System Requirements for Setup**

### **Hardware requirements**

You have to 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.

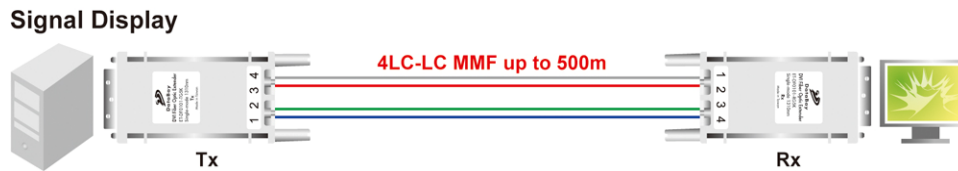
### **Software requirements**

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

*Tip: In general, most of note PCs is not capable to supply sufficiently DC powers for two modules.*

## Installation

**Important: Please use the installation procedure below. Improper, or no operation may result if the start-up sequence is not correctly followed.**



### Multimode Fiber (4LC)

**Figure 3** Installation of Optical DVI extender

#### Installation Step

##### **Step 1**

Carefully unpack the contents of the shipping group.

##### **Step 2**

Connect each duplex LC fiber cable one by one as indicated number. The channel “1” of TX corresponds to channel “1” of RX. The other channels are the same connection.

##### **Step 3**

Connect the AC/DC adaptor to the RX module.

Neglect AC/DC adaptor to the TX module. The PC may supply voltage source via DVI receptacle.

##### **Step 4**

Plug directly the TX module in the DVI receptacle of PC. Do NOT use any intermediate cable or adaptor between them.

##### **Step 5**

Plug the RX directly module in the DVI receptacle of display. Do NOT use any intermediate cable or adaptor between them.

##### **Step 6**

Power on the PC and display.

**Note1 :** The set-up of screen might be fitted to the display resolution. It is certain to happen such unfitness if it is first time to boot up in using this extender module. Then, go to Display Properties in Windows systems and click the tap of Settings. Then you can set the right display resolution to meet your display. Once you set the right resolution, you could see displaying the initial screen at the same resolution as just before you powered on.

**Note2 :** You might not use the AC/DC adaptor at TX module, but use the power supplied through a DVI pin from the graphic cards. After completing the installation instruction, if the system doesn't work properly, you could re-connect the AC/DC adaptor while all powers for the system are ON

## **Troubleshooting**

### ***The display displays only black screen***

Ensure that all AC and DC plugs and jacks used by external power supplies are firmly connected. Ensure that the DVI ports are firmly plugged in to the PC and display. Ensure that the Tx and Rx modules plug 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 SXGA (1280x1024)@75Hz refresh ratio, but optionally UXGA at 60Hz. Reset the system. Disconnect and reconnect the optical DVI cables or DC power adaptors.

## **Maintenance**

No special maintenance is required for the optical DVI extender and power supplies. Ensure that the TX, RX 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 DataBay.

## **Technical Support and Service**

For commercial or general product support, contact your reseller. For technical service, contact DataBay by email [sales@databay.com.tw](mailto:sales@databay.com.tw) or visit its website at [www.databay.com.tw](http://www.databay.com.tw)

## Product Specifications

### Specification

PARAMETER	SPECIFICATION	Remark
Max length	300M @ WUXGA 500M @ WUXGA	62.5/125 MMF 4-LC 50/125 MMF 4-LC
Max resolution	1920 × 1200	Single link
Max DVI bandwidth	1.65 Gbps per channel	
EDID support	Pseudo DDC	Customers optional
HDCP compliant	No	
Operating voltage	5VDC	
Supply current	180mA±30 280mA±30	TX module RX module
Optical property	4 channels 850nm @ -6dBm	VCSEL
Operating Temperature	-0°C to 50°C	
Storage Temperature	-20°C to 75°C	
Dimension	TX unit : 90 × 40 × 19.6 RX unit : 90 × 40 × 19.6	L × W × H (mm)
Weight	TX unit : 65g ; RX unit : 65g	

### Adaptor Specification

PARAMETER	SPECIFICATION	Remark
Input	100~240VAC	0.2A 50~60Hz
Output	DC 5V	1.0 A
DC Jack	Inside 5V / Outside ground	

### Resolution and Distance Reference

Resolution Mode	Resolution	Maximum Distance	Remark
WUXGA	1920x1200 (16:10)	300m (62.5/125) / 500m(50/125)	
UXGA	1600x1200 (4:3)	300m (62.5/125) / 500m(50/125)	1.65Gbps
TV 1080p	1920x1080p (16:9)	300m (62.5/125) / 500m(50/125)	
SXGA	1280x1024 (5:4)	400m (62.5/125) / 600m (50/125)	1.25Gbps
XGA	1024x768 (4:3)	500m (62.5/125) / 700m (50/125)	
TV 1080i	1920x1080i (16:9)	500m (62.5/125) / 700m (50/125)	800Mbps
TV 720p	1280x720p (16:9)	500m (62.5/125) / 700m (50/125)	
SVGA	800x600 (4:3)	500m (62.5/125) / 700m (50/125)	

## **FCC/CE Statement**

This device complies with part 15 of FCC Rules and EN 55022/55024/61000-3 for CE certification. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 and 2 of FCC Rules and EN 55022/55024/61000-3 for CE certification. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction guide, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult a service representative for help.

Properly shielded and grounded cables and connectors must be used in order to comply with FCC/CE emission limits. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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