

Description

DVI (Digital Video Interface) recently has become increasingly popular in the application of video transmission system. In view of the extreme of electrical performances, however, the traditional copper wire cable imposes limits on signal transmission distance and signal quality. In reality, optical fiber is of low dispersion, which in turn has the strength of longer signal transmission distance and better signal transmission quality in comparison to the traditional copper wire cable. ACE PLUS DVIE003 DVI Dual-link extender provide the DVI dual-link Digital Video, Full-duplex RS232 and Audio transmitting capability through the optical fiber. This all optical transmitting solution can fulfill customer's need in far-end Video/Audio broadcasting and data control, which shows the advantage of high performance and good signal quality as well as low cost.



DVIE003

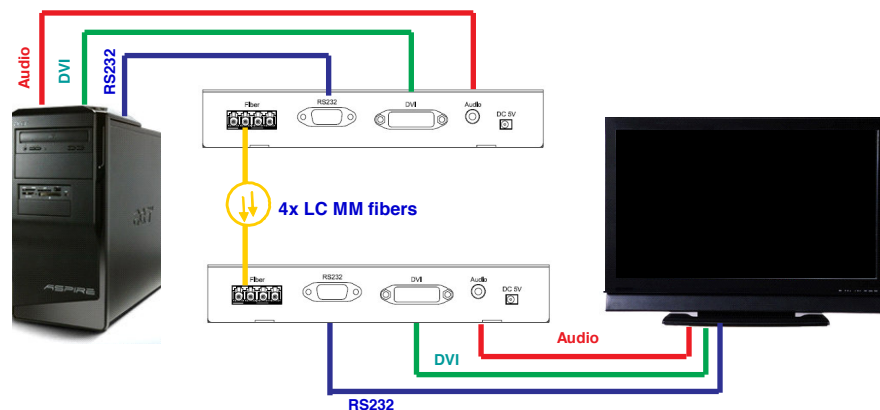
Features

- Long distance DVI dual-link digital video, audio and RS232 transmission
- High resolution and image quality
- Pseudo-EDID with auto-learning function
- No RF Interference by optical fiber
- External hardware installation, free of software or driver installation
- Class 1 laser product complies with EN 60825-1

Application

- Remote monitor for traffic, industrial, military control
- LCD, Projector, Plasma display connection
- Large video wall system
- Theater

Application



Ordering information

Part Number	Description	Note
DVIE003-TX- <u>XX</u>	Transmitter side	DVI Dual-link × 1, 2-way full-duplex RS232 × 1, Audio × 1
DVIE003-RX- <u>XX</u>	Receiver side	
DVIE003- <u>XX</u>	Transmitter + Receiver	
	<u>XX</u> 01: US Plug for AC adaptor 02: EU Plug for AC adaptor 03: UK Plug for AC adaptor	

This product does not include optical fibers

Package include

- TX module × 1
- RX module × 1
- 5V adapter × 2

Optional : DVI cable、EU/UK/AU Plug converter of 5V adapter

Specification

PARAMETER	SPECIFICATION	NOTE
Max length	500 m	4 × 50/125 μm or 62.5/125 MM glass fiber (The length difference between these 4 fibers should be less than 0.5m)
Optical Power Budget	10 dB	
Max resolution	DVI dual link (2560 × 1600)	
Max DVI bandwidth	1.65 Gbps per channel	
EDID support	Pseudo DDC	With auto-learning function
HDCP compliant	No	
Operating voltage	DC 5V	
Electrical Power consumption	TX: 3W	5V/600mA
	RX: 3W	5V/600mA
Operating Temperature	-10°C to 50°C	
Storage Temperature	-20°C to 75°C	
Dimension	180 × 120 × 30	L × W × H (mm)
Weight	~ 600g	TX or RX
LED indicator	Power: Power indicator Fiber: Fiber link signal Source: DVI source indicator Sink: DVI sink indicator EDID: Auto-learning indicator	

Requirements

- DVI Source (DVD player or PC)
- DVI Sink (LCD TV or Projector)
- 100~240VAC 50~60Hz 0.2A electricity

Adapter Specification

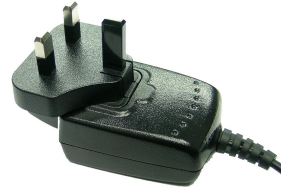
PARAMETER	SPECIFICATION	NOTE
Input	100~240VAC	US plug
Output	DC 5V	1.0 A
DC Jack	Inside 5V / Outside ground	



US Plug



EU Plug

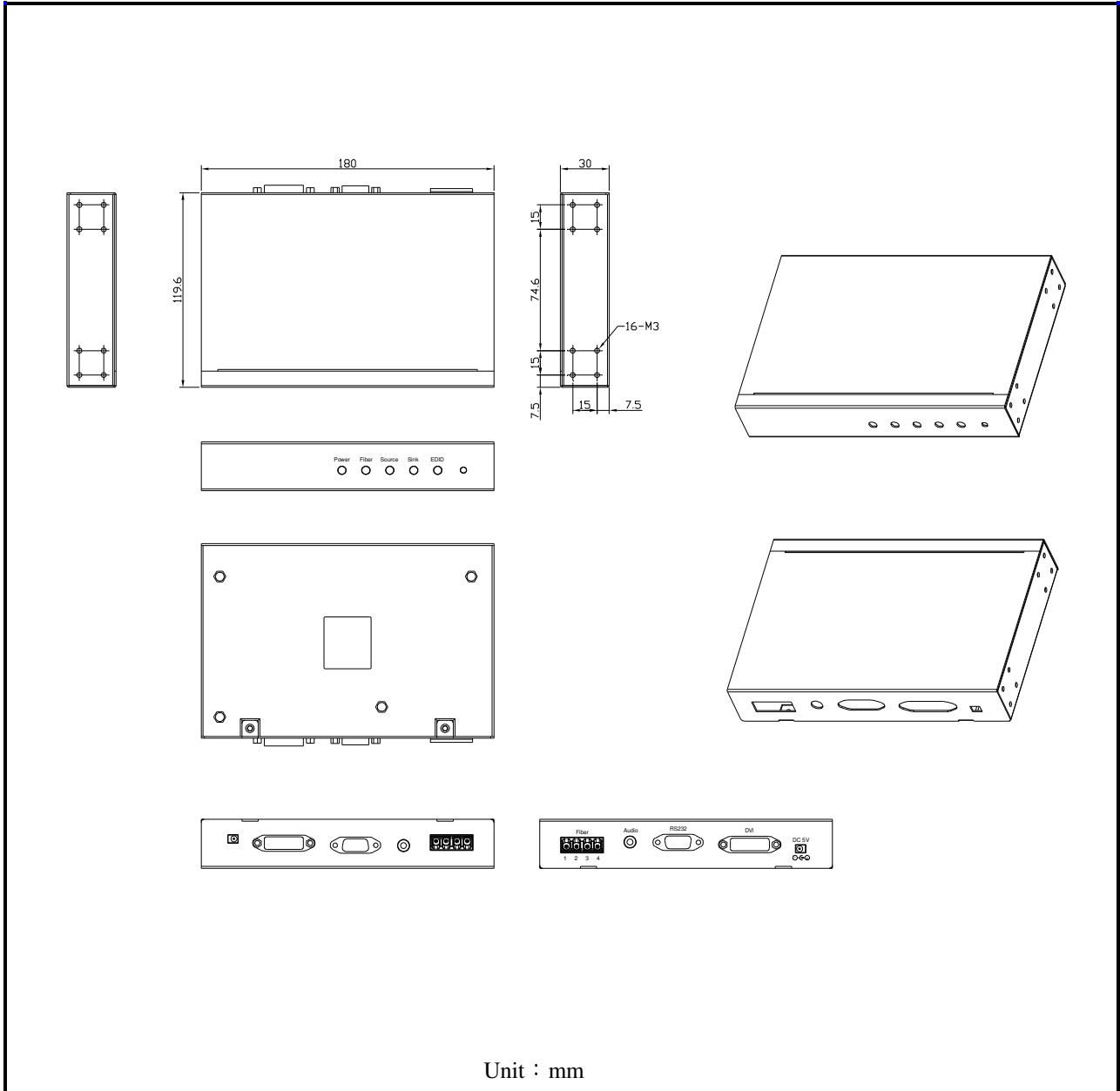


UK Plug

Pseudo EDID support

There is virtual EDID data structure in TX module. This provides pseudo monitor information to the host. Then host can work at different modes by reading this data. It supports all standard modes such as VGA, SVGA, XGA, SXGA and UXGA...etc. The initial EDID code which was written in the production line might not include the suitable code for your monitor. You might use Auto-learning function to copy the EDID code from your monitor.

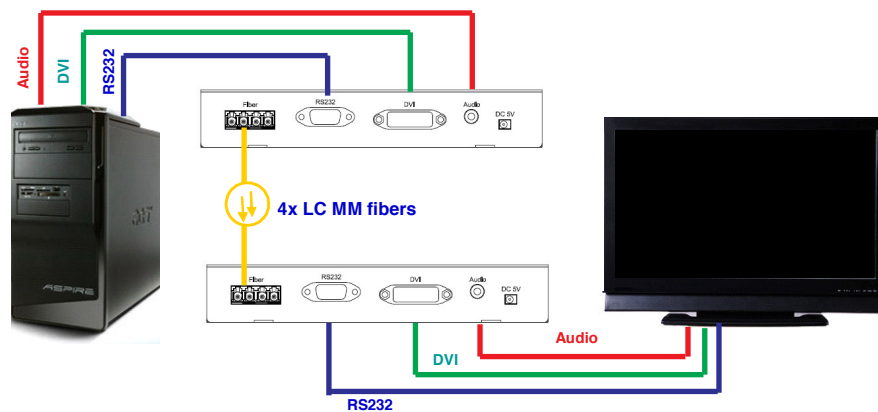
Dimensions



Installation

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

Application 1: Point to Point



Step 1

Carefully unpack the contents of the shipping group. Check the following items:

- TX module or RX module
- AC/DC Adaptor

Step 2

Connect each 4xLC 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 adapter to the TX and RX module.

Step 4

Use the DVI, RS232, and Audio cable to connect the each port of TX side to the corresponding ports of PC or DVD players.

Step 5

Use the DVI, RS232, and Audio cable to connect the each port of RX side to the corresponding ports of display.

Step 6

Power on the PC and display.

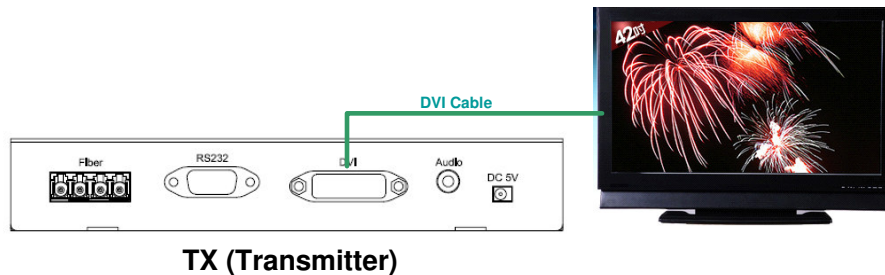
Note1 : The set-up of screen might be fitted to the display resolution. It is certain to happen such unfitness if it is first time to boot up in using this extender module. Then, go to Display Properties in Windows systems and click the tap of Settings. Then you can set the right display resolution to 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.

Auto-Learning Function Instruction

To perform the auto-learning function, please follow the steps below to copy the monitor EDID code into TX (Transmitter) EEPROM.

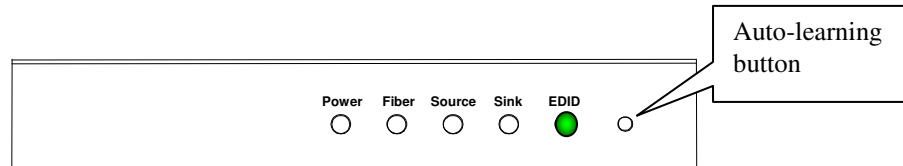
Step 1

Use DVI cable to connect TX (Transmitter) side to the monitor,



Step 2

Push the Auto-learning button in the front panel. The “EDID” LED will be twinkling. After several seconds the LED will be extinguish. Then the Auto-learning process has completed, and now, the EDID code of the monitor has been copied into TX EEPROM.



Step 3

Follow the installation steps to setup the connections.