

PureLink

DVI-DOC-F Digital Signal Isolator Owner's Manual



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Chapter 1. Package Contents

Please make sure all of the following items are included in the package:

- 1) DVI-DOC-F Module
- 2) DC 12V Power Supply
- 3) User Manual

Chapter 2. General Specification

The DVI-DOC-F was created as a customized isolation solution for fiber-optical signal transmission. Simply send a serial command or disconnect the power adapter from the DVI-DOC-F to isolate a signal transmission from source to display.

Model	DVI-DOC-F
Input Signal	Digital RGB(DVI), Single Link 3.5mm Analog Stereo Audio
Output Signal	Digital RGB(DVI), Single Link 3.5mm Analog Stereo Audio
Supporting Display Resolutions	VGA(640x480)~HDTV(1920x1080) WUXGA(1920x1200)
Max. Distance	Max. 100ft (30m)
Connector Type	Input : 29 PIN DVI-I Connector Output : 29 PIN DVI-I Connector Audio:3.5mm Stereo Jack Power: 2mm DC Connector RS-232: 3 PIN Phoenix Connector
Power Supply	DC 12V, 3.0A, Consumption: DC 12V, 6.36 Max
Dimension (WxDxH)	6.88 x 4.5 x 1.0 in. 174.63 x 114.3 x 25.4 mm
Weight	0.8 lbs (0.36 kg)

Chapter 3. Operation and Reliability Specification

1. Operating Environment

Temperature: 50F ~ 104F (10°C~ 40°C), Humidity: 10% ~ 80%, Altitude: 3,000m Max.

2. Transit Environment

Temperature: -13F ~ 140F (-25°C~ 60°C), Humidity: 5% ~ 95%, Altitude: 15,000m Max.

3. Storage Environment

Temperature: -4F ~ -49F (-20°C~ 45°C), Humidity: 5% ~ 95%, Altitude: 3,000m Max.

4. Reliability

MTBF: 90% at over 50,000 hours aging test

- In compliance with LCD Monitor reliability test standard

Chapter 4. Main Features

- DVI + 3.5mm Stereo Audio Signal Isolator with Pixel Re-Clocking
- Pure Fiber Optic Interconnection to prevent any possible harmonic resonance
- Signal On/Off control for high security environments
- Plug and Play
- Fully compatible with DDWG DVI standard
- HDMI compatible (with DVI to HDMI adapter)
- HDMI v1.3, with support for Deep Color and 7.1-channel Dolby TruHD and DTS MasterHD

Chapter 5. Installation and Connection Instructions

◆Important: Please use the installation procedure below.

Improper or no operation may result if the start-up sequence is not correctly followed.

Step 1

Connect DVI and audio cable to DVI-DOC-F

Step 2

Connect Power adapter to DVI-DOC-F

Operating Instruction

EDID

DVI-DOC-F provides Auto EDID management system; easy and fail safe way to handle EDID, via EDID library system and EDID emulation.

What's EDID?

Extended Display Identification Data (EDID) is an information set that digital display provides to describe its capabilities to a Video source. Video source will know what kinds of displays are connected and it will determine which resolution to Output according to the EDID information received from the display.

The EDID normally includes manufacturer name and serial number, sets of capable resolution including native resolution, supported timing, pixel mapping data (for digital displays only) and etc.

In a digital connectivity environment; in order to support the maximum resolution of connected monitor, EDID handshake is a critical because improper EDID handshake between sources to the display will result in no image on the display.

EDID handshake may sound simple; however, with multiple peripheral devices within the chain, display's EDID information easily get lost or blocked while it is traveling to the source device.

EDID library

14 most widely used EDID data (1-9, A-E) is pre-programmed internal EEPROM chipset which user can take and save onto the DVI-DOC-F.

EDID library list

CODE	FUNCTION	CODE	FUNCTION
0	EXTERNAL	8	1600*900
1	800*600	9	1600*1200
2	1024*768	A	1680*1050
3	1280*768	B	1920*1200
4	1280*1024	C	1080i 2CH AUDIO
5	1360*768	D	1080P 2CH AUDIO
6	1366*768	E	1080P Multi CH AUDIO
7	1400*1050	F	RESERVED

In order to load EDID from EDID library, select rotary dial to desired code then power cycle the unit to save.

Emulation

The user can easily save an EDID data from any display devices directly onto DVI-DOC-F. By saving display device's EDID information on DVI-DOC-F, it will act as a display to the Video source.

* Connect display device to DVI-DOC-F's DVI IN port and then press EDID button for 3 seconds. It will copy and save display's EDID information to Transmitter's EEPROM.

Note) There may be display devices that are not allowing other device to emulate its EDID data.

Note) Certain EDID data may not be compatible with some devices, in this case, it is recommended to user scaling option receivers.

Chapter 6. Technical Specification

- ◆ Data Transfer Speed : Up to 2.25 Gbps (Deep Color)
- ◆ Frequency Range : 25 ~ 165 Mhz
- ◆ Supporting Display Resolutions : Up to WUXGA (1920x1200)@60Hz
- ◆ Max Distance : Single Link - 50M (164ft)
- ◆ Input Ports : DVI-D Female 29P
- ◆ Output Ports : DVI-D Female 29P
- ◆ Audio Ports : 3.5mm Stereo Jack
- ◆ Power Supply : 12V DC / 3.0A

Chapter 7. RS232 Control Connection

RS232 connection allows the user to interface the PureLink switch with a serial port on a computer or other control device. The computer or other control device may require additional software for various control functions. (Control software not included)

- BAUD RATE : 19200bps

- OPT ENABLE COMMAND : *255FE!+ENTER => Feedback : FIBER ENABLE

- OPT DISABLE COMMAND : *255FD!+ENTER => Feedback : FIBER DISABLE

Chapter 8. Warranty

2 (Two) Years Warranty

PureLink warrants this DVI-DOC-F to be free from defects in workmanship and materials, under normal use and service, for a period of two (2) years from the date of purchase from PureLink or its authorized resellers. If a product does not work as warranted during the applicable warranty period, PureLink 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 PureLink. 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. PureLink 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 PureLink for repair under warranty or not.

Warranty Limitation and Exclusion

PureLink 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 PureLink 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.