

## *Installation Manual*

### FDX-500



DVI-D and Stereo Audio Extender  
up to 1,500 feet over Fiber Optic Cable

# **Introduction**

The FDX-500 is a perfect solution for extending the video and audio output of a computer in a remote location. It extends DVI-D and Stereo Audio to a remote location up to 1,500 feet away. The FDX-500 is immune to electromagnetic interference, making it ideal for use in situations where there is considerable interference. The FDX-500 is also very secure because it's fiber optic signals cannot be easily tapped.

# **Features**

- Top Signal Quality at Maximum Extension Over Multimode Fiber (1,500 ft.)
- Superior Image Quality at all Resolutions
- DVI-D Video Resolutions up to 1920 x 1200 at 60Hz (1280 x 1024 at 75Hz)
- Supports Stereo Audio
- Fiber Plug Type FC
- Compatible With all Operating Systems
- Compatible With all Major KVM Switches
- Compact Metal Casing
- DDC from internal table for most display models
- DDC learning from display
- Uses universal DVI Single Link connectors
- Zero pixel loss with TMDS signal correction

# **Applications**

- Corporate or Educational Presentations
- Financial (Remote Servers/User Control)
- Call Centers
- Industrial (Long-Range Workstation Isolation)
- Information Terminals/Kiosks
- Airport Installations (Air Traffic Control/Passenger Information)
- KVM Extension where Exceptional Quality of Signal is Crucial
- Medical (Remote Operation Away from Sensitive/Magnetic Equipment)
- Recording (for Large Studios where Editing/Mixing Stations are Compact and/or Require Complete Silence)

## **Why Fiber Optic?**

SmartAVI has created a full line of fiber optic extender products, understanding that this technology is superior to traditional cabling.

### **Fiber optic cables are:**

- capable of transmitting over very long distances with no signal loss.
- immune to electromagnetic interference. In situations where there is considerable interference, fiber optic cabling is the only solution.
- much more secure because they cannot be easily tapped. For this reason, military and law enforcement agencies use fiber optic cables for the transmission of sensitive data.
- relatively inexpensive and small enough to be routed through small spaces.

FDX-500TX Front



FDX-500TX Rear



FDX-500RX Front



FDX-500RX Rear



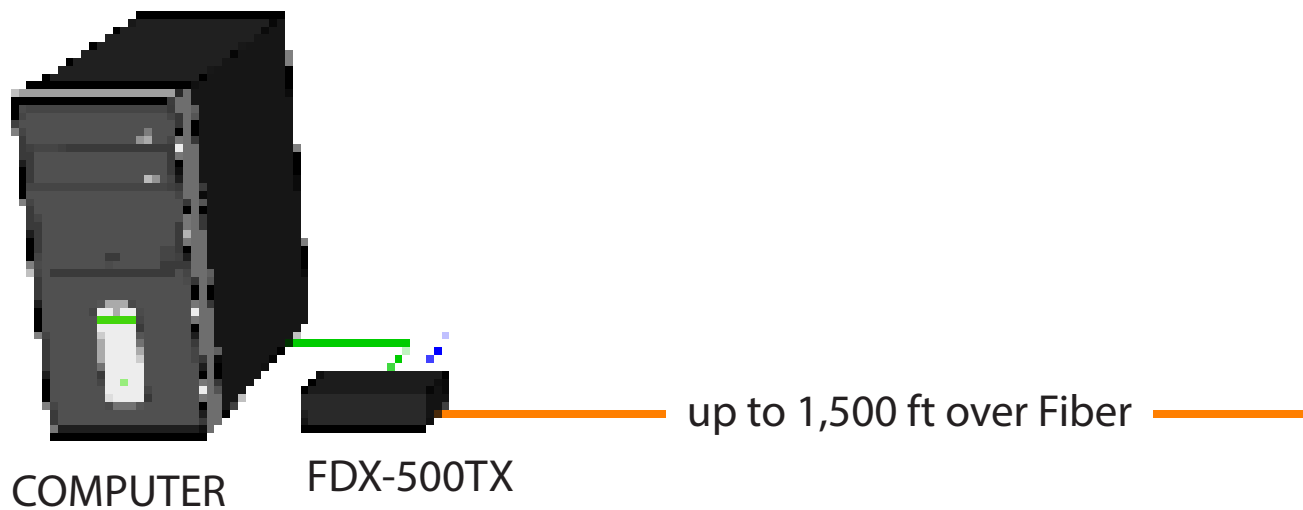
# What's in the Box?

PART NO.	QTY	DESCRIPTION
FDX-TX500	1	FDX-500 Transmitter Unit - DVI-D and Stereo Audio Extender over Fiber Optic Cable
FDX-RX500	1	FDX-500 Receiver Unit - DVI-D and Stereo Audio Extender over Fiber Optic Cable
Power Supply	2	PS5VDC4A

## Technical Specifications

VIDEO	
Format	DVI-D Single Line
Maximum Pixel Clock	165 MHz
Input Interface (TX)	(1) DVI-D 29-pin female
Output Interface (RX)	(1) DVI-D 29-pin female
Resolution	Up to 1920 x 1200 @60Hz
DDC	Internal
Input Equalization	Automatic
Input Cable Length	Up to 20 ft.
Output Cable Length	Up to 20 ft.
AUDIO	
Frequency Response	20 Hz to 20 KHz
Impedance	600 ohm
Nominal Level	0-1.0 V
Common Mode	Rejection at 60dB
Input Interface (TX)	(1) 3.5 mm Stereo Audio
Output Interface (RX)	(1) 3.5 mm Stereo Audio
OTHER	
Power	External 100-240 VAC/5VDC4A
Dimensions	5 in W x 1 in H x 3.75 in D
Weight	1 lb.
Approvals	UL, CE, ROHS Compliant
Operating Temp.	32-131°F (0-55 °C)
Storage Temp.	-4-185 °F (-20-85 °C)
Humidity	Up to 95%
RS-232	Data up to 115,000 bps

# Product - Installation Diagram



## Installation

1. Turn off the computer, display, and speakers.
2. Connect the DVI extension cable and audio cable (not included) to the computer and to the ports on the FDX-500-TX.
3. Connect the display to the DVI connector on the FDX-500-RX.
4. Connect speakers to the audio connector on the FDX-500-RX.
5. Connect the FDX-500-TX to the FDX-500-RX with a multimode fiber-optic cable (see opposite page).
6. Connect the power cord and power on the FDX-500TX and the FDX-500-RX.
7. Power on the computer, display and speakers.

## DVI-D MONITOR



## Fiber-Optic Cable Specifications

OPTICAL	
Fiber Type	Multi mode
Connector Type	FC Type
Wavelength	1310 nm/1550 nm (Dual wavelength)
Data Rate	5 Gbps (2.5 Gbps per single wavelength)
Transmission Power	-5 dB Min.
Receiver Sensitivity	-21 dB Max
Distance	500 m Max.

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