

## *Installation Manual*

# FDX-M4U



**Quad DVI-D Extender, with Audio  
and USB Keyboard and Mouse**



# **Introduction**

The FDX-M4U consists of a transmitter and receiver that extend four DVI-D outputs, with audio, USB keyboard and mouse, and RS-232 control. For exceptional quality and security, fiber optic extension is the best solution. The FDX-M4U can go the distance with multi-mode fiber optic cabling with a reach of up to 1,400 feet.

The SmartAVI FDX-M4U is capable of supporting four DVI-D monitors, with USB 1.1 keyboard and mouse, stereo audio with serial (RS-232) control. The system includes a transmitter and receiver, which are connected by four fiber optic cables.

## **Features**

- Quad channel DVI-D, audio and USB keyboard and mouse with RS-232 control
- Top Signal Quality over Multimode Fiber (up to 1,400 feet)
- Video Resolutions up to 1920 x 1200 WUXGA at 60Hz
- Customizable/Programmable DDC Table for Mac/PC
- Supports all USB 1.1 Keyboards and Mice
- Fiber Plug Type LC
- Compatible With all Major KVM Switches
- Supports Mac, PC, and Linux DVI
- Uses universal DVI Single Link connectors
- Zero pixel loss with TMDS signal correction
- Rack Mountable Solution
- Plug-and-play

# **Applications**

## **MEDICAL FIELD**

In the medical field where sensitive electronic devices are used, isolating workstation computers can be a matter of safety. The FDX-M4U allows the workstation computers to be housed in a central location, away from sensitive devices.

## **INDUSTRIAL WORK AREAS**

In industrial work areas that may be too harsh for a workstation computer, the FDX-M4U can consolidate the computers into a safe location.

## **SECURE COMPUTING**

When it comes to security, the FDX-M4U is an excellent deployment option. With the FDX-M4U, devices can be centralized and secured from public access. This, combined with the intrinsic security of fiber optic cable, make the FDX-M4U one of the most secure KVM solutions available.

## **INFORMATION KIOSKS/DISPLAYS**

As with most information booths and kiosks, there is a risk of damage or theft. The FDX-M4U is the best way to secure computer hardware, by consolidating it to a secure location away from public access.

## **FILM/MUSIC RECORDING STUDIOS**

When recording with sensitive cameras and microphones, computers are often too noisy to be used in the immediate vicinity. The FDX-M4U isolates the computers into another room, maintaining the silence that recording artists require.

# 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-M4U Receiver Rear



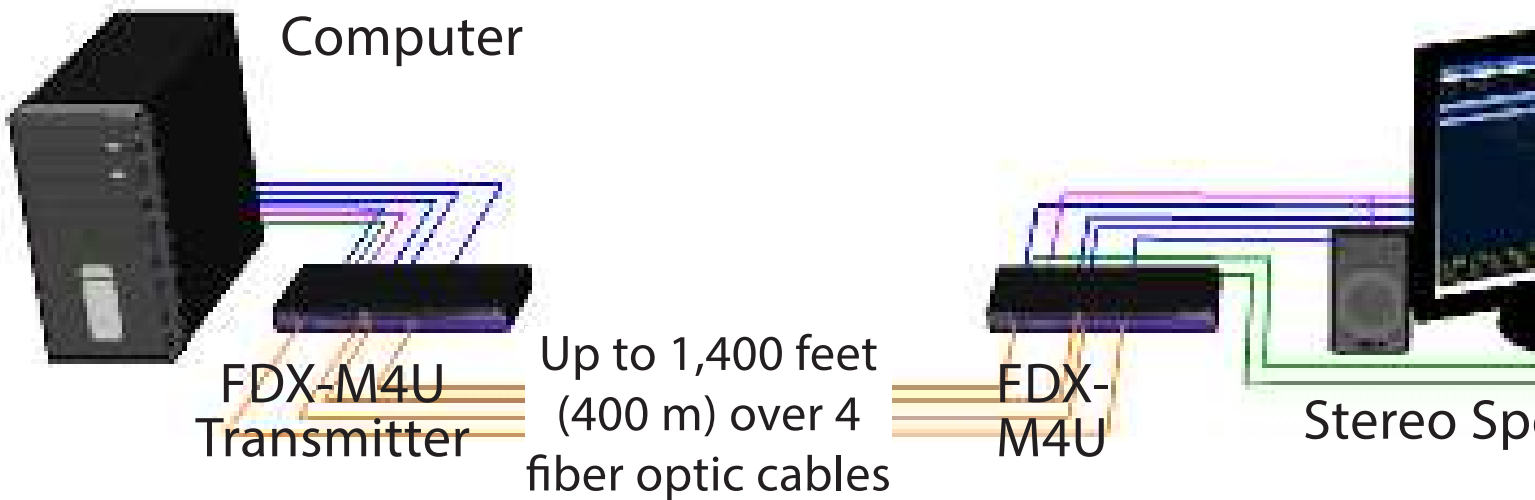
# What's in the Box?

PART NO.	QTY	DESCRIPTION
FDX-TXM4U	1	Point to Point Quad DVI-D, USB Keyboard & Mouse, Audio and RS232 Multimode Fiber Extender Transmitter
FDX-RXM4U	1	Point to Point Quad DVI-D, USB Keyboard & Mouse, Audio and RS232 Multimode Fiber Extender Receiver
Power Cable	2	CCPWR06USA

## Technical Specifications

VIDEO	
Format	DVI-D Single Link
Maximum Pixel Clock	165 MHz
Input Interface (TX)	(4) DVI-D 29-pin female
Output Interface (RX)	(4) 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	
Signal Type	Stereo Audio
Bandwidth	15MHz, 0dB
Impedance	10K Ohm
Connector	3.5mm Stereo Mini Female
Input Interface	(1) 3.5 mm Stereo Audio
Output Interface	(1) 3.5 mm Stereo Audio
USB	
Signal Type	OHCI/UHCI (USB 1.1)
Input Interface (TX)	(1) USB Type B (Female)
Output Interface (RX)	(2) USB Type A (Female)
OTHER	
Power	Internal 110-240 VAC
Dimensions	17 in W x 7 in H x 1.75 in D
Weight	8.0 lbs.
Operating Temp.	0-55 °C (32-131 °F)
Storage Temp.	-20-85 °C (-4-185 °F)
Humidity	Up to 95%
RS-232	Data up to 115,000 bps

# Product - Installation Diagram



## Installation

1. Turn off the computer, displays, and speakers.
2. Connect the DVI extension cables, USB cable, and audio cable (not included) to the computer and to the ports on the FDX-TXM4U.
3. Connect the displays to the DVI connectors on the FDX-M4U.
4. Connect USB mouse and keyboard ONLY to the USB connectors on the FDX-M4U.
5. Connect speakers to the audio connector on the FDX-M4U.
6. Connect the FDX-TXM4U to the FDX-M4U with a multimode fiber-optic cable (see opposite page).
7. Connect the power cord and power on the FDX-3000TX and the FDX-M4U.
8. Power on the computer, displays and speakers.

## 4 DVI-D Displays



## Fiber-Optic Cable Specifications

OPTICAL	
Fiber Type	Multi mode
Connector Type	LC 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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