Smart-AVI
SMART AUDIO VIDEO INNOVATION

Installation Manual

FDX-4P

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

Introduction

The FDX-M4P 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-M4P can go the distance with multi-mode fiber optic cabling with a reach of up to 1,400 feet.

The SmartAVI FDX-M4P 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-M4P 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-M4P can consolidate the computers into a safe location.

SECURE COMPUTING

When it comes to security, the FDX-M4P is an excellent deployment option. With the FDX-M4P, devices can be centralized and secured from public access. This, combined with the intrinsic security of fiber optic cable, make the FDX-M4P 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-M4P 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-M4P 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.
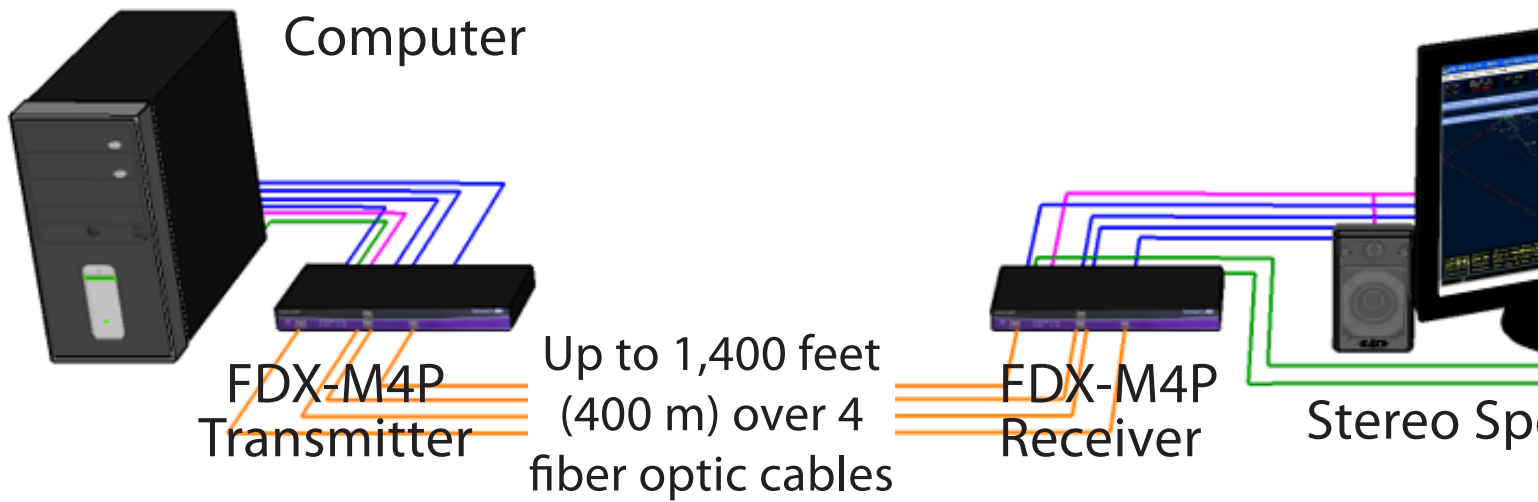
FDX-M4P Receiver Rear

What's in the Box?

PART NO.	QTY	DESCRIPTION
FDX-TXM4P	1	Point to Point Quad DVI-D, USB Keyboard & Mouse, Audio and RS232 Multimode Fiber Extender Transmitter
FDX-RXM4P	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 Line
Maximum Pixel Clock	165 MHz
Input Interface	(4) DVI-D 29-pin female
Output Interface	(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	
Frequency Response	20 Hz to 20 KHz
Impedance	600 ohm
Nominal Level	0-1.0 V
Common Mode	Rejection at 60dB
Input Interface	(1) 3.5 mm Stereo Audio
Output Interface	(1) 3.5 mm Stereo Audio
USB	
Signaling	USB Keyboard and Mouse ONLY
Input Interface	(1) USB Type B
Output Interface	(2) USB Type A
OTHER	
Power	Internal 110-240 VAC
Dimensions	17 in W x 7 in H x 1.75 in D
Weight	8 lbs.
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

Computer

FDX-M4P
Transmitter

Up to 1,400 feet
(400 m) over 4
fiber optic cables

FDX-M4P
Receiver

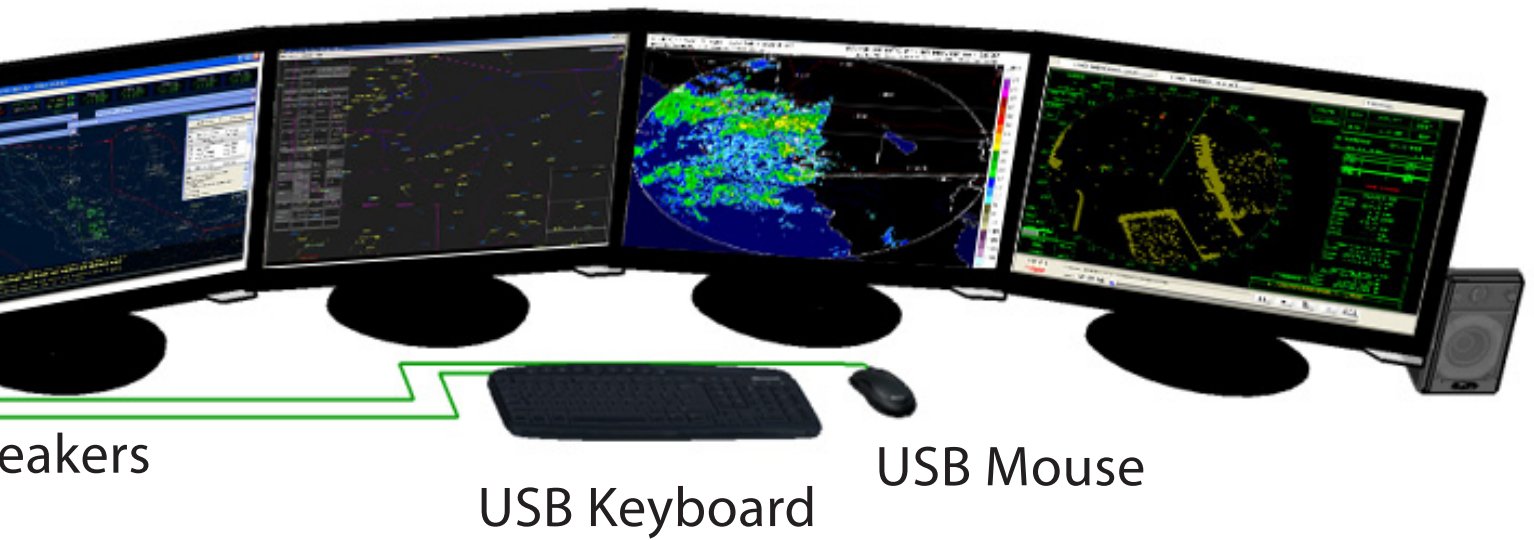Stereo Sp

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-
    TXM4P.
3. Connect the displays to the DVI connectors on the FDX-RXM4P.
4. Connect USB mouse and keyboard ONLY to the USB connectors
    on the FDX-RXM4P.
5. Connect speakers to the audio connector on the FDX-RXM4P.
6. Connect the FDX-TXM4P to the FDX-RXM4P with a multimode
    fiber-optic cable (see opposite page).
7. Connect the power cord and power on the FDX-3000TX and the
    FDX-RXM4P.
8. Power on the computer, displays and speakers.

4 DVI-D Displays

eakers

USB Keyboard

USB Mouse

Fiber-Optic Cable Specifications

OPTICAL	
Fiber Type	Single, 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.

NOTICE

The information contained in this document is subject to change without notice. Smart-AVI makes no warranty of any kind with regard to this material, including but not limited to, implied warranties of merchantability and fitness for any particular purpose.

Smart-AVI will not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance or use of this material.

No part of this document may be photocopied, reproduced or translated into another language without prior written consent from Smart-AVI.

For more information, visit www.smartavi.com.

Smart-AVI
SMART AUDIO VIDEO INNOVATION

SmartAVI, Inc. / Twitter: smartavi
11651 Vanowen St., North Hollywood, CA 91605
Tel: (818) 503-6200 Fax: (818) 503-6208
http://www.SmartAVI.com