

# FDX-3000

## User Manual

### Multimode Fiber Extender



For the Extension of any USB Keyboard and Mouse,  
Stereo Audio, DVI-D and RS-232 Signals

**Smart-AVI**  
SMART AUDIO VIDEO INNOVATION

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# WHAT'S IN THE BOX

| PART NO.   | QTY | DESCRIPTION                    |
|------------|-----|--------------------------------|
| FDX-TX3000 | 1   | FDX-3000 Multimode Transmitter |
| FDX-RX3000 | 1   | FDX-3000 Multimode Receiver    |
| PS5VDC4A   | 2   | Power Supply                   |
|            | 1   | Quick Start Guide              |

## TRANSMITTER

## RECEIVER



Figure 2-1

## INTRODUCTION

The FDX-3000 consists of a transmitter and receiver that extend a USB Keyboard, USB Mouse, DVI-D Video, Stereo Audio and RS-232 signals over a Multimode Fiber Optic Cable up to 1,400 feet.

## FEATURES

- Top Signal Quality at Maximum Extension Over Multimode Fiber (1,400 ft.)
- Video Resolutions up to 1920 x 1200 at 60Hz (1280 x 1024 at 75Hz)
- Customizable/Programmable DDC Table
- Supports USB Keyboard/Mouse
- Supports Stereo Audio
- Supports DVI-D
- Supports RS-232 from 300bps to 115,200bps
- Supports all USB Keyboards Fully Transparent
- Fiber Plug Type LC
- Compatible With all Operating Systems
- Compact Metal Casing

## 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.

## 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)

## TECHNICAL SPECIFICATIONS

| <b>VIDEO</b>            |                                                                                      |
|-------------------------|--------------------------------------------------------------------------------------|
| Input Interface         | (1) DVI-D Female (Single-Link)                                                       |
| Output Interface        | (1) DVI-D Female (Single-Link)                                                       |
| Resolution              | Up to 1920x1200 at 60Hz                                                              |
| DDC / EDID              | Internal Table can be Re-programmed                                                  |
| Input Equalization      | Automatic                                                                            |
| Input DVI cable length  | Up to 20 ft.                                                                         |
| Output DVI cable length | Up to 20 ft.                                                                         |
| <b>AUDIO</b>            |                                                                                      |
| Signal Type             | Stereo Audio                                                                         |
| Impedance               | 10K Ohm                                                                              |
| Connector               | 3.5mm Stereo Mini Female                                                             |
| <b>USB</b>              |                                                                                      |
| Signaling               | USB Keyboard and Mouse Only                                                          |
| Input Interface         | (1) USB Type B                                                                       |
| Output Interface        | (2) USB Type A                                                                       |
| <b>OTHER</b>            |                                                                                      |
| RS-232                  | Data up to 115,200 bps                                                               |
| Power Supply            | PS5VDC4A                                                                             |
| Weight                  | 1 lb. TX + RX units                                                                  |
| Dimensions              | 4.5"W X 6"D X 2"H                                                                    |
| Fiber Extender          | Fiber<br>730 ft. @ Multimode 62.5μ<br>1400 ft. @ Multimode 50μ<br>Fiber-Plug type LC |
| Operating Temp          | 32-131 °F (0-55 °C)                                                                  |
| Storage Temp            | -4-185 °F (-20-85 °C)                                                                |
| Operating Humidity      | Up to 95% No Condensation                                                            |

## HARDWARE INSTALLATION

# Smart-AM

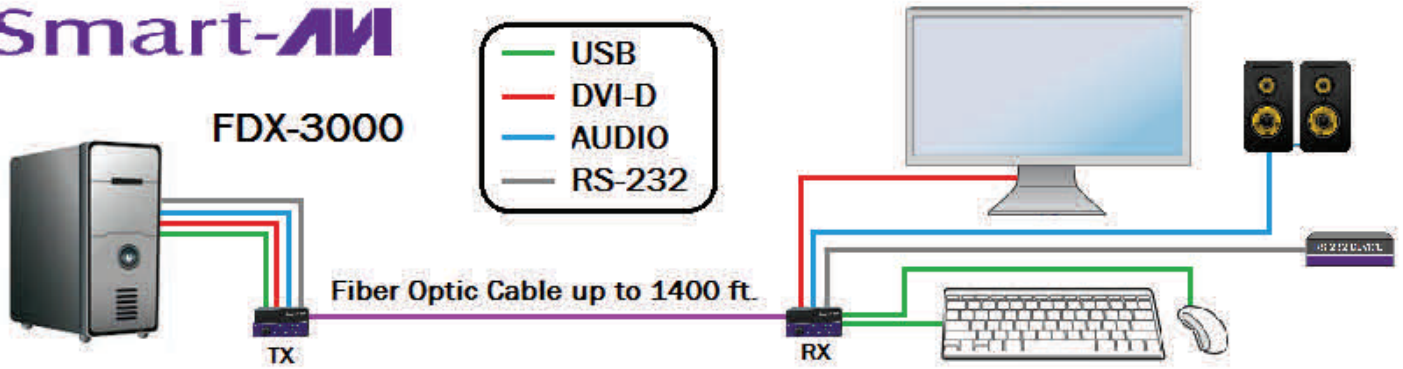


Figure 5-1

1. Turn off the computer, display, and speakers.
2. Connect the display to the DVI connector on the FDX-3000-RX.
3. Connect USB mouse and keyboard ONLY to the USB connectors on the FDX-3000-RX.
4. Optionally connect speakers and an RS-232 device to the FDX-3000-RX.
5. Connect a USB cable to the computer and to the USB port on the FDX-3000-TX.
6. Optionally connect audio and RS-232 cables to the computer and to the ports on the FDX-3000-TX.
7. **DO NOT CONNECT** the computer's DVI output to the FDX-3000-TX.
8. Connect the FDX-3000-TX to the FDX-3000-RX with a multimode fiber-optic cable.
9. Connect the power cords and power on the FDX-3000-TX and the FDX-3000-RX. Color Bars should appear on the monitor.
10. Type "Ctrl Ctrl o" and using the arrow keys select "EDID LEARN" on the menu and hit "Enter" key.
11. After the menu displays "DONE" connect the computer's DVI output to the FDX-3000-TX.

NOTE: If the display does not appear correctly, repeat steps 7- 11 and try the other 2 resolution selections.

# LIMITED WARRANTY STATEMENT

## A. Extent of limited warranty

Smart-AVI Technologies, Inc. warrants to the end-user customers that the Smart-AVI product specified above will be free from defects in materials and workmanship for the duration of 1 year, which duration begins on the date of purchase by the customer. Customer is responsible for maintaining proof of date of purchase.

Smart-AVI limited warranty covers only those defects which arise as a result of normal use of the product, and do not apply to any:

- a. Improper or inadequate maintenance or modifications
- b. Operations outside product specifications
- c. Mechanical abuse and exposure to severe conditions

If Smart-AVI receives, during applicable warranty period, a notice of defect, Smart-AVI will at its discretion replace or repair defective product. If Smart-AVI is unable to replace or repair defective product covered by the Smart-AVI warranty within reasonable period of time, Smart-AVI shall refund the cost of the product.

Smart-AVI shall have no obligation to repair, replace or refund unit until customer returns defective product to Smart-AVI.

Any replacement product could be new or like new, provided that it has functionality at least equal to that of the product being replaced.

Smart-AVI limited warranty is valid in any country where the covered product is distributed by Smart-AVI.

## B. Limitations of warranty

To the extent allowed by local law, neither Smart-AVI nor its third party suppliers make any other warranty or condition of any kind whether expressed or implied with respect to the Smart-AVI product, and specifically disclaim implied warranties or conditions of merchantability, satisfactory quality, and fitness for a particular purpose.

## C. Limitations of liability

To the extent allowed by local law the remedies provided in this warranty statement are the customers sole and exclusive remedies.

To the extent allowed by local law, except for the obligations specifically set forth in this warranty statement, in no event will Smart-AVI or its third party suppliers be liable for direct, indirect, special, incidental, or consequential damages whether based on contract, tort or any other legal theory and whether advised of the possibility of such damages.

## D. Local law

To the extent that this warranty statement is inconsistent with local law, this warranty statement shall be considered modified to be consistent with such law.

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