

SFX SERIES

SINGLE/DUAL/QUAD DVI-D & USB 2.0 FIBER EXTENDER



USER MANUAL

SFX	DVI-D & USB 2.0 Fiber Extender
SFX-2P	2-Port DVI-D & USB 2.0 Fiber Extender
SFX-4P	4-Port DVI-D & USB 2.0 Fiber Extender



Designed and Manufactured in the USA

Smart-AVI

1-800-284-2131
www.smartavi.com

TABLE OF CONTENT

TECHNICAL SPECIFICATIONS	3-4
WHAT'S IN THE BOX?	4
FRONT AND REAR	4
INSTALLATION	5-7
LED's BEHAVIOR	8
SYSTEM OPERATION	9
TROUBLESHOOTING	9
TECHNICAL SUPPORT	9
LIMITED WARRANTY STATEMENT	10

TECHNICAL SPECIFICATIONS

VIDEO		
Format	DVI-D Single Line	
Maximum pixel clock	165 MHz	
Input Interface (TX)	SFX	(1) DVI-D 29-pin female
	SFX-2P	(2) DVI-D 29-pin female
	SFX-4P	(4) DVI-D 29-pin female
Output Interface (RX)	SFX	(1) DVI-D 29-pin female
	SFX-2P	(2) DVI-D 29-pin female
	SFX-4P	(4) DVI-D 29-pin female
Resolution	Up to 1920 x 1200 @ 60 Hz	
DDC	5 volts p-p (TTL)	
Input equalization	Automatic	
Input cable length	Up to 20 ft	
Output cable length	Up to 20 ft	
RS-232		
Input interface (TX)	(1) DB9 (Female)	
Output interface (RX)	(1) DB9 (Female)	
Speed	Up to 115 Kbps	
USB		
Signal type	EHCI (USB 2.0) and OHCI/UHCI (USB 1.1)	
Input interface (TX)	(1) USB type B (female)	
Output interface (RX)	(4) USB type A (female)	
AUDIO		
Signal type	Stereo audio	
Bandwidth	15 MHz, 0 dB	
Impedance	10 kOhm	
Connector	3.5 mm stereo mini female	
OPTICAL		
Fiber type	Duplex, multi mode	
Connector type	Duplex LC	
Wavelength	1310 nm/1550 nm (dual wavelength)	
Data rate	2x2.5 Gbps (2.5 Gbps per single wavelength)	
Transmission power	-5 dB min	
Receiver sensitivity	-21 dB max	
Distance	500 m max	

TECHNICAL SPECIFICATIONS (CONTINUED)

OTHER		
Power supply	SFX	External 100-240 VAC/5VDC4A @ 20 W
	SFX-2P, SFX-4P	Internal 100-240 VAC
Dimensions	SFX	8.5" W x 1.85" H x 5.4" D
	SFX-2P, SFX-4P	17" W x 1.7" H x 7" D
Weight	SFX	1.5 lbs
	SFX-2P, SFX-4P	8 lbs
Operating temperature	32-131 °F (0-55 °C)	
Storage temperature	-4-185 °F (-20-85 °C)	
Humidity	Up to 95% (non-condensing)	

WHAT'S IN THE BOX?

SFX Unit	Single/Dual/Quad Head DVI-D, Stereo Audio, RS-232 Multimode Fiber Extender.
PS5VD4A -WLLMNT or CCPWR06	5V DC, 3A (minimum) power adapter with center-pin positive polarity or 6' Power Plug Cable.
User Manual	

SFX TRANSMITTER REAR



SFX TRANSMITTER FRONT



SFX RECEIVER REAR



SFX RECEIVER FRONT

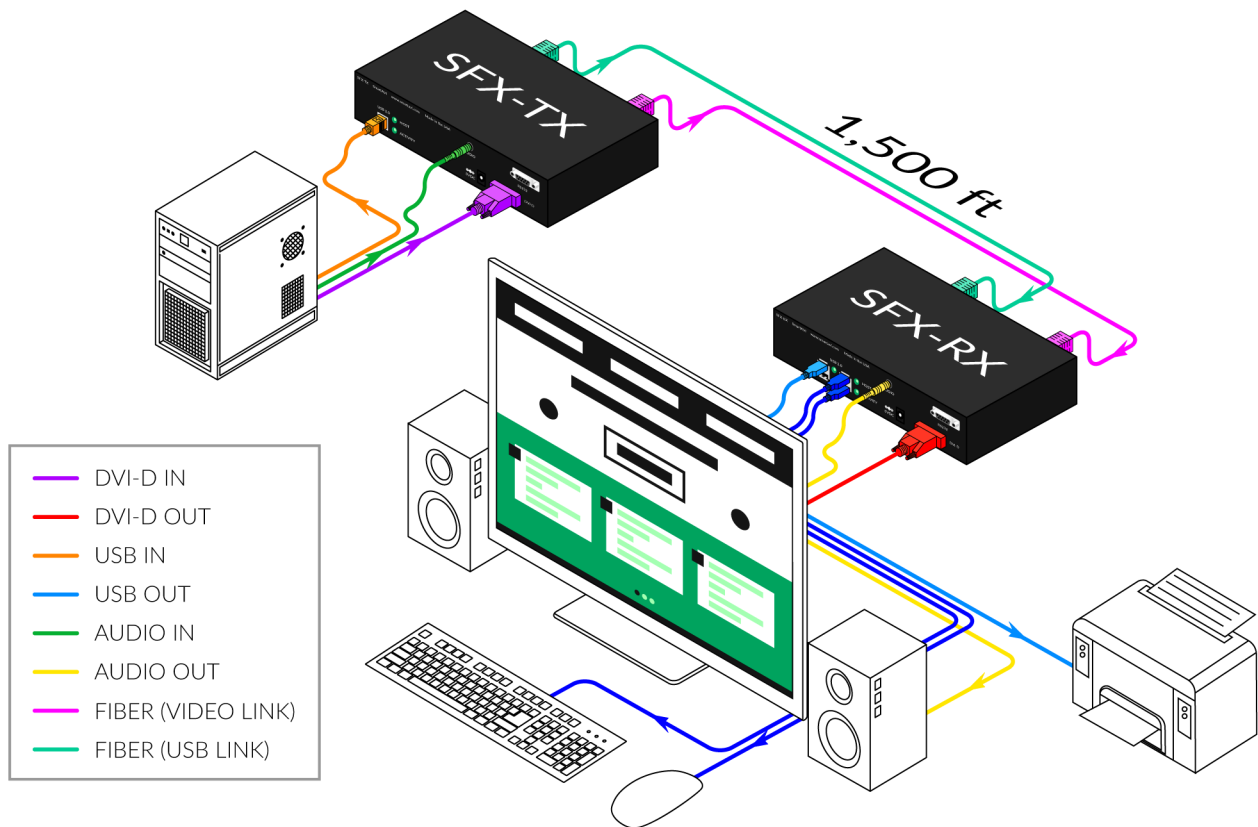


INSTALLATION

1. Ensure that power is turned off or disconnected from the unit and the computers.
2. Use a **DVI cable** to connect the DVI output port from each computer to the corresponding DVI-I IN ports of the unit.
3. Use a **USB cable (Type-A to Type-B)** to connect a USB port on each computer to the respective USB ports of the unit.
4. Optionally connect a **stereo audio cable** (3.5mm to 3.5mm) to connect the audio output of the computers to the AUDIO IN ports of the unit.
5. Connect a monitor to the DVI-I OUT console port of the unit using a **DVI cable**.
6. Connect a **USB keyboard and mouse** in the two USB console ports.
7. Optionally connect stereo speakers to the AUDIO OUT port of the unit.
8. Finally, power on the extender by connecting a **12VDC power supply** or **power plug cable** to the power connector, and then turn on all the computers.

APPLICATION DIAGRAM SFX

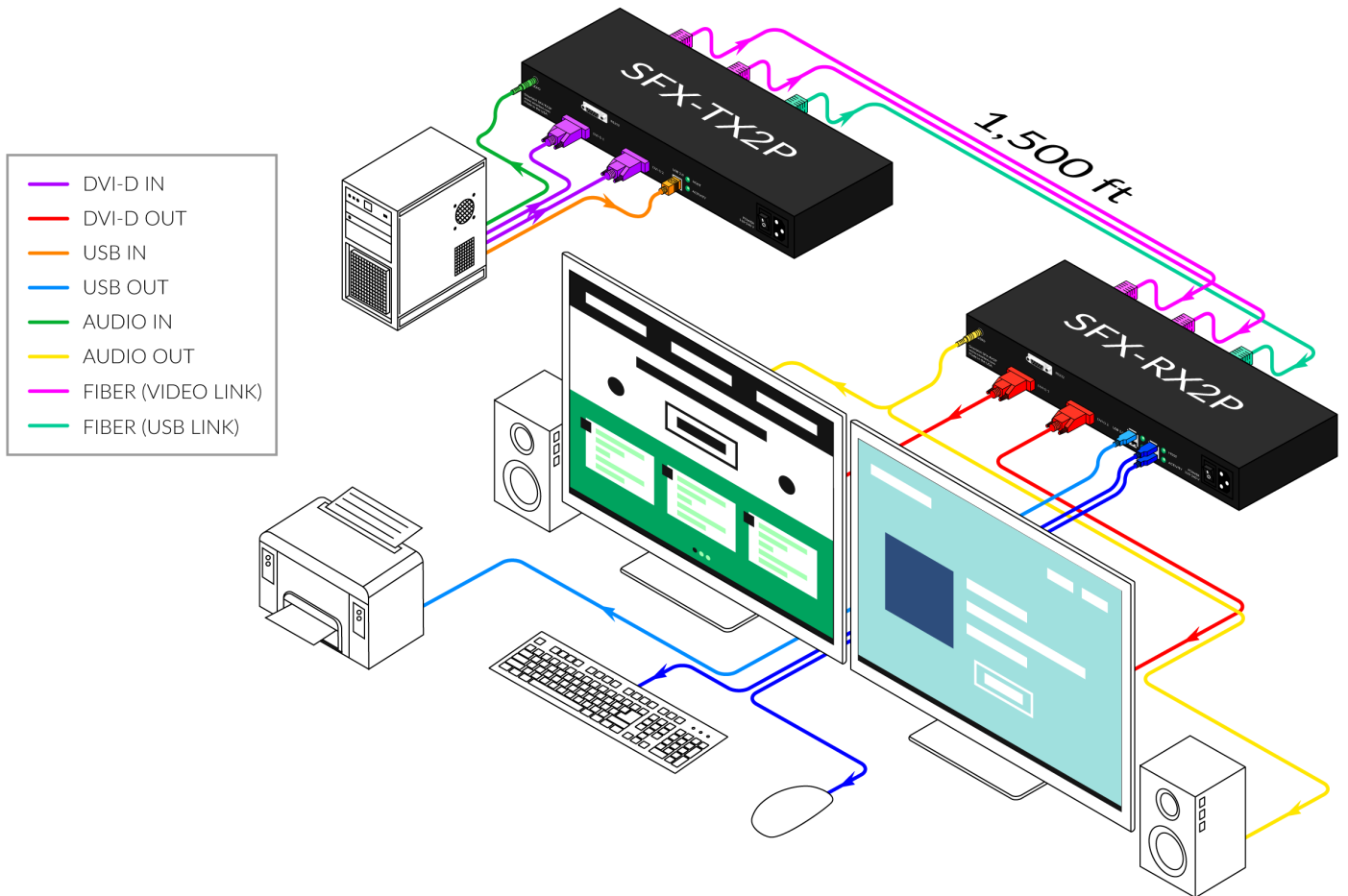
The SFX is a Single Head DVI-D (1920x1200), RS-232 signal, USB 2.0, USB keyboard-mouse and stereo audio extender, sending signals up to 1,500 ft away over two conventional and inexpensive fiber optic cables.



Part No.	Description
SFX-M-S	DVI-D, Stereo Audio, USB 2.0/1.1, RS-232 Multimode Fiber Extender Up to 1,500 ft. Includes: [SFX-TX, SFX-RX, 2 X (PS5VD4A)]

APPLICATION DIAGRAM SFX-2P

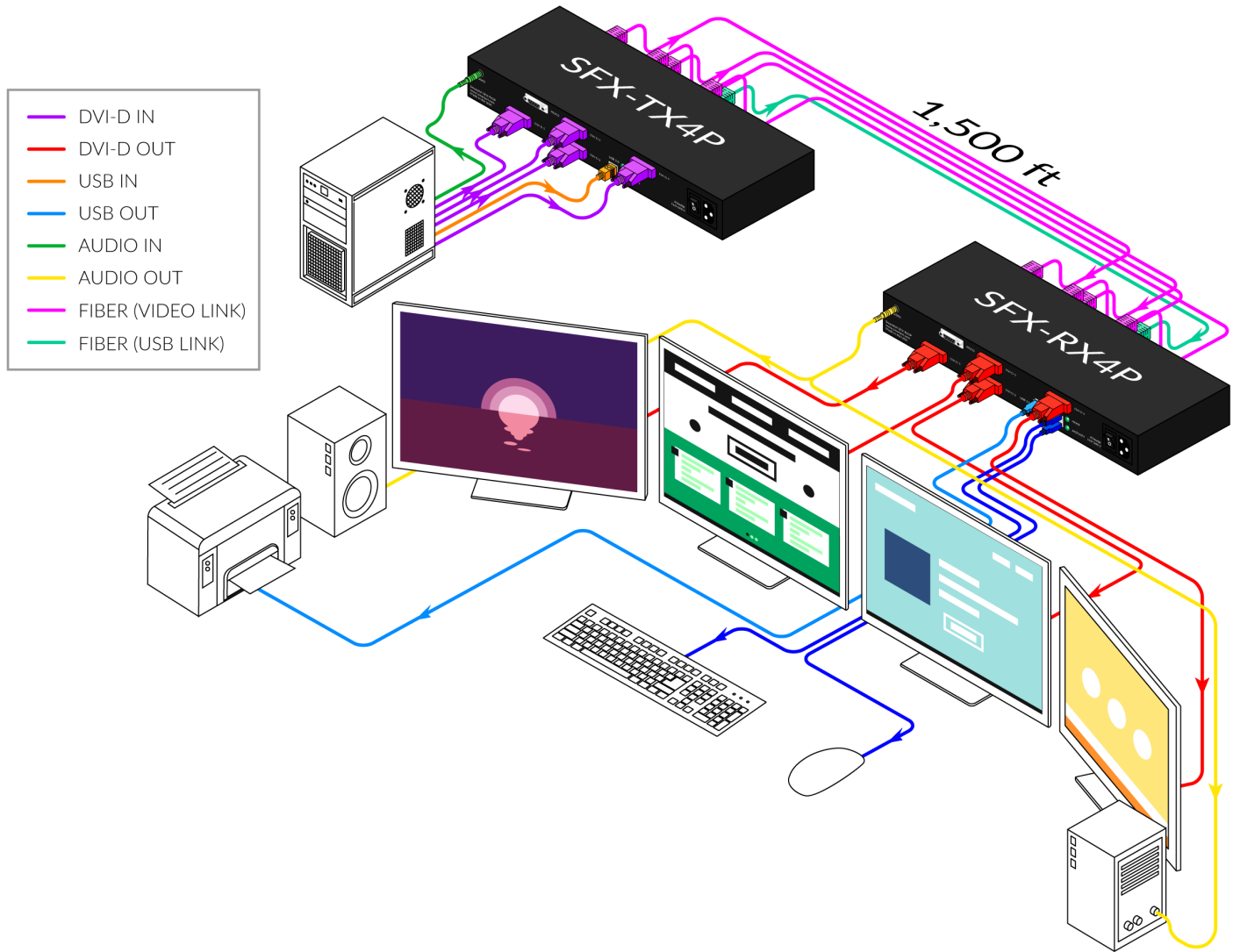
The SFX-2P is a Dual Head DVI-D (1920x1200), RS-232 signal, USB 2.0, USB keyboard-mouse and stereo audio extender, sending signals up to 1,500 ft away over three conventional and inexpensive fiber optic cables.



Part No.	Description
SFX-2P-M-S	Dual DVI-D, Stereo Audio, USB 2.0/1.1, RS-232 Multimode Fiber Extender Up to 1,500 ft. Includes: [SFX-2P-TX, SFX-2P-RX, 2 x (CCPWR06)]

APPLICATION DIAGRAM SFX-4P

The SFX-4P is a Quad Head DVI-D (1920x1200), RS-232 signal, USB 2.0, USB keyboard-mouse and stereo audio extender, sending signals up to 1,500 ft away over five conventional and inexpensive fiber optic cables.



Part No.	Description
SFX-4P-M-S	Quad DVI-D, Stereo Audio, USB 2.0/1.1, RS-232 Multimode Fiber Extender Up to 1,500 ft. Includes: [SFX-4P-TX, SFX-4P-RX, 2 x (CCPWR06)]

LED CONTROL

SDX-XT	
PWR	Solid red LED when power is connected
Link	Solid green LED when cat5 is connected
FW	Blinking green LED when transferring information between unit and computer
SDX-XT-2P	
PWR	Solid red LED when power is connected
Link	Solid green LED when cat5 is connected
FW	Blinking green LED when transferring information between unit and computer
SDX-XT-4P	
PWR	Solid red LED when power is connected
Link	Solid green LED when cat5 is connected
FW	Blinking green LED when transferring information between unit and computer

TROUBLESHOOTING

No Power

- Make sure that the power adapter is securely connected to the power connector of the unit.
- Check the output voltage of the power supply and make sure that the voltage value is around 12VDC.
- Replace the power supply.

No Video

- Check if all the video cables are connected properly.
- Connect the computer directly to the monitor to verify that your monitor and computer are functioning properly.
- Restart the computers

Keyboard is not working

- Check if the keyboard is properly connected to the unit.
- Check if the USB cables connecting the unit and the computers are properly connected.
- Try connecting the USB on the computer to a different port.
- Make sure that the keyboard works when directly connected to the computer.
- Replace the keyboard.

Mouse is not working

- Check if the mouse is properly connected to the unit.
- Try connecting the USB on the computer to a different port.
- Make sure that the mouse works when directly connected to the computer.
- Replace the mouse.

No Audio

- Check if all the audio cables are connected properly.
- Connect the speakers directly to the computer to verify that the speakers and the computer audio are functioning properly.
- Check the audio settings of the computer and verify that the audio output is through the speakers.

TECHNICAL SUPPORT

For product inquiries, warranty questions, or technical questions, please contact info@smartavi.com.

LIMITED WARRANTY STATEMENT

A. Extent of limited warranty

SmartAVI, Inc. warrants to the end-user customers that the SmartAVI 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.

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

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

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

SmartAVI limited warranty is valid in any country where the covered product is distributed by SmartAVI.

B. Limitations of warranty

To the extent allowed by local law, neither SmartAVI nor its third party suppliers make any other warranty or condition of any kind whether expressed or implied with respect to the SmartAVI 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 SmartAVI 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.

Smart-AVI

SMART AUDIO VIDEO INNOVATION

NOTICE

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

20180109



Designed and Manufactured in the USA

Tel: (800) AVI-2131 • (702) 800-0005
2455 W Cheyenne Ave, Suite 112
North Las Vegas, NV 89032

www.smartavi.com