

## Pathfinder PFD 4x4 / 4x2 Matrix Switchers



PFD-4x4-PCA pictured.



### INTRODUCTION

The PathFinder Matrix Switcher family is a ground-up development aimed at bringing new capabilities and a new level of performance to matrix switching. These smaller 4X4 and 4X2 matrix units are ideal for applications requiring limited source to display routing / switching and have many of the same features as our larger units.

At the heart of the PathFinder is a design that delivers high bandwidth and flat frequency response to insure that the original image is switched and distributed without being altered. Proper signal reproduction is much more than bandwidth. Frequency response plays a vital role in the clarity and accuracy of an image. These units feature greater than 400 MHz (typical) of bandwidth to -3dB. Better, from 0 to 250 MHz the signal is +/-0.5 dB making them the flattest matrix switchers on the market.

The stereo audio option provides balanced and unbalanced stereo audio switching with independent input trim control and output volume level control. Audio can be configured for "follow" or "breakaway" mode to allow separate video and audio source routing.

The Pathfinders can be easily controlled via front panel buttons or RS-232 input from a control system or PC. The command set is an easy to follow, easy to implement ASCII command set that gives control systems complete access to all functions. The units have an RS-232 input and output port to allow daisy chaining of additional serial controlled devices.

### KEY FEATURES

- Very high bandwidth
- Easy front panel or RS-232 control
- Integral rack ears
- Audio follow or breakaway
- Audio input trims
- Audio output volume control
- Sized to fit smaller installations
- Vertical interval switching
- Simple full function front panel controls

### APPLICATIONS

- Boardrooms
- Schools
- House of Worship
- Rental and Staging
- Convention Centers
- Security and Surveillance
- Monitoring Centers
- Courtrooms

We call these units "the kids" because they are the smallest of the FSR Pathfinder Matrix switcher family. Check out our full line of matrix switchers up to 32X32.

### ORDERING INFORMATION

PathFinder 4X2 / 4x4 Computer and Stereo Audio Matrix Switchers		
Item #	Part #	Description
16796	PFD-4x2-PC	4x2 Computer Video Matrix Switcher
16797	PFD-4x2-PCA	4x2 Computer Video and Stereo Audio Matrix Switcher
16798	PFD-4x4-PC	4x4 Computer Video Matrix Switcher
16799	PFD-4x4-PCA	4x4 Computer Video and Stereo Audio Matrix Switcher

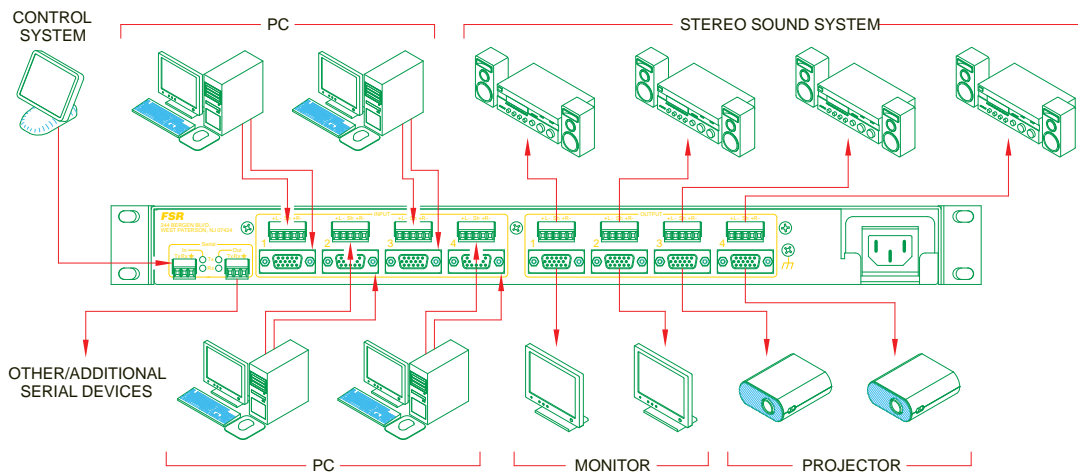
### FSR Inc.

244 Bergen Boulevard  
 West Paterson, NJ 07424  
 Phone: 973.785.4347  
 Fax: 973.785.4207  
 Web: www.fsrinc.com  
 E-mail: sales@fsrinc.com

## TECHNICAL SPECIFICATIONS

<b>VIDEO INPUT</b>	
Input Impedance	75 ohms for R, G, and B inputs (pins 1, 2, and 3)
Nominal level	0.7V p-p
Maximum level	3V p-p with 0V offset
Input return loss	-48dB @ 5 MHz, -44dB @ 10 MHz
<b>VIDEO OUTPUT</b>	
Output Impedance	75 ohms for R, G, and B outputs (pins 1, 2, and 3)
Minimum bandwidth	-3dB @ 375 MHz 0.7V p-p
Typical Bandwidth	-3dB @ 410 MHz -.7V p-p
Flatness	+/-0.5dB 0-250 MHz
Output Offset Voltage	+/-10 mV max (with input floating)
Gain	Unity into 75 ohm load
Adjacent Channel crosstalk	-62dB @ 10 MHz, -47dB @ 100 MHz
Output return loss	-48dB @ 5 MHz, -42dB @ 10 MHz
<b>SYNC IN</b>	
Frequency range	0-200 MHz
Input Impedance	576 ohms for H and V inputs (pins 13 and 14)
Polarity	positive or negative
Minimum level	2.2 Volts
Maximum level	6 Volts
<b>SYNC OUT</b>	
Delay	18 nS max
Rise/Fall time	2nS max
Output Impedance	75 ohms for H and V outputs (pins 13 and 14)
Polarity	Same as input (noninverting)
Level	4.5V min into Hi-Z, 2.2V min into 75 ohms
<i>NOTE: RGB switching is performed during vertical blanking interval of the old source for the cleanest possible switch</i>	
<b>AUDIO INPUT (PCA Models)</b>	
Input trim range	+15 to -5dB in 1 dB steps
Max Input level	+7dBm
<b>AUDIO OUTPUT (PCA Models)</b>	
Gain	6dB
Output level control range	+5 to -45dB in 1 dB steps plus mute
Mute Attenuation	>95dB @ 2 KHz
Max output level	+12dBm into 600 ohm balanced load
Adjacent Channel Crosstalk	< -90dB @ 2 KHz
Stereo separation	> 90dB @ 2 KHz
THD + Noise	< 0.1% @ 1 KHz
Frequency Response	+/-0.25dB 20Hz-20KHz -3dB @ 160 KHz typical
<b>INPUT POWER 100-240 VAC 50/60 Hz 25VA</b>	

## TYPICAL APPLICATION



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Specifications are subject to change without notice

