

## **LARGE ROUTERS - ADX SYSTEMS**

Sigma's ADX series provides practical and economic solutions for large routing applications. Engineered for expansion, systems can be configured from 16x16 to 128x128, for any combination of digital video and audio as well as composite video, sync pulses, Y/C, Y, Pr, Pb or RGB analog signals. Our standard Sigma control interfaces can support up to 8 switching levels.

An ADX system integrates directly with other Sigma routing systems and control options. Adding a level of ADX routing to your existing non-Sigma routing system is also easily achieved via our new control protocol converter, the CCM2100.

In conjunction with our SigMatriX software, the ADX can be programmed to initiate system salvo switching. This is especially useful in the event of EAS activation. The salvo is user determined and the EAS interface is controlled via contact closure.



### **FEATURES**

- Supports a wide range of signal formats
- Can be configured from 16x16 to 128x128
- Can be custom configured to suit your needs
- Designed to meet the highest reliability standard

# **LARGE ROUTERS - ADX SYSTEMS**

The specifications listed below apply to standard features and signal options for all ADX systems. ADX systems can be configured with any combination of available signal types. For more information on configuring a system that suits your needs, please contact our customer service center - 866 569 2681.

## **SPECIFICATIONS**

### **ANALOG AUDIO**

Input/Impedance	30 K $\Omega$ , balanced
Bandwidth	150 kHz
Input Level	+24 dBu, maximum
Output Level	+24 dBu, maximum into 600 $\Omega$
Frequency Response	$\pm 0.1$ dB 10 Hz to 30 kHz any level; $\pm 0.25$ dB to 100 kHz
Hum and Noise	<-85 dBu w/ 22 kHz low pass
THD	<0.015%, max. at +24 dBu, 0.002% typical
Crosstalk	90 dB 10 Hz to 20 kHz all inputs driven, 110 dB typ.
Gain	Adjusted to unity $\pm 0.2$ dB, 600 $\Omega$ termination
Connectors	3 pin detachable terminals

### **DIGITAL AUDIO**

Input Signal Level	7 Vp-p max.
Input Impedance	110 $\Omega$ , terminated
Input Coupling	Transformer
CMR	7V Peak DC to 20 kHz
Input Cable Length	1500 ft. max. (Belden 1800B)
Output Impedance	110 $\Omega$
Output Coupling/Level	Transformer, 7 Vp-p max. (4 Vp-p typical)
Output Isolation	> 50 dB
Rise and Fall Time	< 30 nsec (10% to 90%)
Common Mode Noise	30 dB below signal
Jitter	< 20 nsec
Electrical Length	90 nsec typical (64x64 frame)

### **DIGITAL VIDEO**

Input Signal Level	0.600 Vp-p (Unequalized)
Input Return Loss	-15 dB min. to 5 MHz 270 MHz
Input Cable	100 ft max. with optional E.Q. 1000 ft
Outputs Signal Level	0.800 Vp-p $\pm 10\%$
Outputs Return Loss	-15 dB min. 5 MHz to 270 MHz
Output Rise & Fall Time	1.0 nsec $\pm 0.25$ at 20% to 80%
Jitter	450 psec (non-reclocked), 250 psec (reclocked)
Data Rate	400 Mb/s
Overshoot	10% maximum
Connectors	BNC

### **ANALOG VIDEO**

Input/Impedance	75 $\Omega$ Terminated (VI-16TDC) High Z, looping (VI-16L)
Coupling	DC, (AC optional)
Input Return Loss	35 dB minimum to 5 MHz
Input DC Offset	$\pm 0.3$ V max. ( $\pm 6.0$ max. AC coupled- optional)
Tilt, Field, and Line	1% maximum
Frequency Response	$\pm 0.1$ dB from DC to 25 MHz
Bandwidth	150 MHz
Hum and Noise	-65 dB rms below 1Vp-p
Differential Phase	0.15 $^\circ$ at 4.43 MHz 10-90% APL
Differential Gain	0.15% at 4.43 MHz 10-90% APL
Input Gain Variation	0.15 dB maximum
Crosstalk	>55 dB at 5 MHz
Connectors	BNC

### **POWER**

Voltage Range	115VAC or 230VAC, 50/60 Hz (specify with order)
Power Consumption	120 W maximum per frame

### **MECHANICAL**

Dimensions (1 Frame)	10.5" H x 19" W 15" D
----------------------	-----------------------

### **SYSTEM CONTROL INTERFACE**

Data Trans. System	RS-232 and RS-422/485
Serial Port Baud Rate	9,600; 19,200; 38,400; 57,600 baud
Control Levels	Eight
Communication Line	Coaxial, up to 2000 feet
Control Panels	Up to 64 on Comm. Line
Number of Salvos	Four to ten, depending on Master Control Panel
Protocol	Simple ASCII, supports Xon/Xoff
External Sync Ref.	Composite Sync or Blackburst, auto detect
Connectors	BNC for comm. line and ext. sync. 9 pin "D" for serial port 25 pin "D" for Control Bus to slave frames