



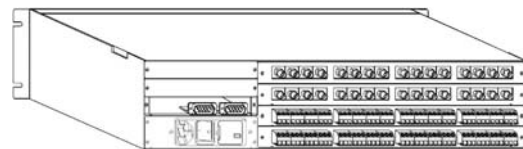
## MERCURY Matrix Routing Switcher

- Matrix I/O sizes of 4x4, 4x8, 8x4, 8x8, 8x16, 12x4, 16x8, 16x16
- Video bandwidth options of 40 MHz, 200 MHz, and 400 MHz
- Composite video, Y/C, component video, HD component video (up to 1080p)
- RGB, RGBS and RGBHV
- Digital video and digital audio, up to 360 Mb/s
- Switch different signal types in combination
- Local or remote control option
- Disconnect any cross-point from the front panel or via serial control
- Switch any input to any or all outputs in any combination
- Three enclosure size options for customization
- Up to 64 user-definable presets
- Matrix control and scheduling software under Windows
- RS-232/RS-422 control
- Supports balanced and unbalanced audio devices concurrently
- Vertical interval switching option

The MERCURY Matrix Routing Switcher is the perfect solution for small to medium size signal switching requirements. It is configurable to realize multiple matrices of various sizes in a single system, eliminating the need for multiple switchers in an installation.

### KEY APPLICATIONS:

- Simulation
- Command & Control
- Executive Briefing



*Standard Mercury Back Panel.  
Your matrix may differ from the one pictured above.*

**RGB SPECTRUM®**  
a visual  
communications  
company™



**Corporate Headquarters**  
950 Marina Village Parkway  
Alameda, California 94501  
TEL: (510) 814-7000  
FAX: (510) 814-7026  
WEB: [www.rgb.com](http://www.rgb.com)  
e-mail: [sales@rgb.com](mailto:sales@rgb.com)

**European Headquarters**  
La Clairiere, Chemin des Abeilles  
Quartier De Malouesse  
Luynes Aix en Provence 13080 France  
TEL: (33) 442 240884  
CELL: (33) 607 247428  
e-mail: [philipd@rgb.com](mailto:philipd@rgb.com)

## General

AC Power:	100-240 VAC
Maximum Power Consumption:	47-63 Hz, 30 Watts maximum per enclosure
Operational Temperature:	32° to 110°F (0° to 43°C)
Humidity:	0 to 90% non-condensing
Enclosure Dimensions:	17.0" (43.18 cm) Depth 17.0" (43.18 cm) Width without rack ears 19.0" (48.26 cm) Width with rack ears 3.5" (8.89 cm) Height (2 ru.)
Weight:	17 lbs (7.73 kg) per enclosure
Input/Output Range:	4x4, 4x8, 8x4, 8x8, 8x16, 12x4, 16x8, 16x16
Communications:	RS-232, RS-422
Approvals:	CE, ETL, (conforms to UL 1419)
Signal Types:	RGB, RGBS, RGBHV, Audio (mono, stereo, and multi-channel), Composite (NTSC, PAL, SECAM), Y/C, YUV, HDTV, Serial Digital to 360 Mb/s, RS-232, RS-422

## Audio

Throughput:	
Frequency Response:	<±0.1 dB (20 Hz to 20 kHz)
THD + Noise (THD+N):	<0.01% (20 Hz to 20 kHz, Vin = -3.3 dBu to +13.2 dBu)
Crosstalk (Adjacent Channel):	<-95 dB (1 kHz, Vin = ±24V balanced)
Signal to Noise Ratio (SNR):	-103 dB (20 Hz to 20 kHz, Vin = +13.2 dBu)
Input:	
Maximum Level:	Common +22.7 dBu, differential +28.2 dBu
Impedance:	18kW
Type:	Balanced or unbalanced
CMRR:	-90 dB typical, -70 dB minimum (20 Hz to 20 kHz, Vcm = ±10V)
Gain Adjustment Range (optional):	-3 dB to +10 dB (Vin = 3V p-p)
Connector Type(s):	Disconnectable, 3 position screw terminal
Output:	
Maximum Level:	+25.96 dBu, balanced
Impedance:	50W
Type:	Balanced or unbalanced
Gain Adjustment Range:	-3 dB to +10 dB
Connector Type(s):	Disconnectable, 3 position screw terminal

## Standard Video

Throughput:	
Frequency Response:	±3 dB to 40 MHz or better ±1 dB to 30 MHz or better
Differential Gain*:	0.1% or better (f = 3.58 MHz)
Differential Phase*:	0.1° or better (f = 3.58 MHz)
Crosstalk (Adjacent Channel):	<-40 dB (f = 5 MHz)
Propagation Delay:	<20 ns (Vin = ±0.5V)
Signal to Noise Ratio (SNR):	<-70 dB (Vin = 0.7V, 100% IRE)

\*Performed with a standard five-step modulated staircase test signal

### Input:

Maximum Level:	±5V
Impedance:	75W or Hi-Z (22kW)
Gain Adjustment Range (optional):	-3 dB to +10 dB
Connector Type(s):	BNC
Output:	
Maximum Level:	±5V
Impedance:	75W
Gain Adjustment:	-7.5 dB to +7.5 dB
Connector Type(s):	BNC

## Video

Throughput:	
Frequency Response:	±3 dB to 200 MHz or better
Crosstalk (Adjacent Channel):	<-60 dB (f = 5 MHz)
Propagation Delay:	<20 ns (Vin = ±0.5V)
Signal to Noise Ratio (SNR):	<-70 dB
Input:	(Vin = 0.7V, 100% IRE)
Maximum Level:	±2V
Impedance:	75W or Hi-Z (22kW)
Gain Adjustment Range (optional):	-3 dB to +10 dB
Connector Type(s):	BNC
Output:	
Maximum Level:	±2V
Impedance:	75W
Gain Adjustment Range:	-5.5 dB to +6.7 dB
Connector Type(s):	BNC

## Wideband

Frequency Response:	±3 dB to 200 MHz or better
Crosstalk (Adjacent Channel):	<-60 dB (f = 5 MHz)
Propagation Delay:	<20 ns (Vin = ±0.5V)
Signal to Noise Ratio (SNR):	<-70 dB
Input:	(Vin = 0.7V, 100% IRE)
Maximum Level:	±2V
Impedance:	75W or Hi-Z (22kW)
Gain Adjustment Range (optional):	-3 dB to +10 dB
Connector Type(s):	BNC
Output:	
Maximum Level:	±2V
Impedance:	75W
Gain Adjustment Range:	-5.5 dB to +6.7 dB
Connector Type(s):	BNC

## Ultra Wideband

Frequency Response:	3 dB to 400 MHz or better
Crosstalk (Adjacent Channel):	<-60 dB (f = 5 MHz)
Propagation Delay:	<20 ns (Vin = ±0.5V)
Signal to Noise Ratio (SNR):	<-70 dB
Input:	(Vin = 0.7V, 100% IRE)
Maximum Level:	±2V
Impedance:	75W or Hi-Z (22kW)
Gain Adjustment Range (optional):	-3 dB to +10 dB
Connector Type(s):	BNC
Output:	
Maximum Level:	±2V
Impedance:	75W
Gain Adjustment Range:	-5.5 dB to +6.7 dB
Connector Type(s):	BNC