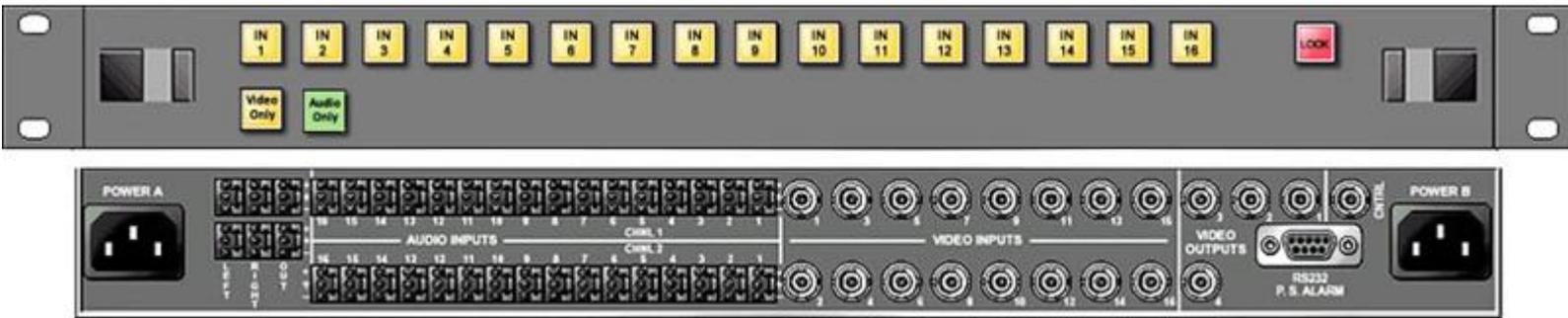




**RJM & Associates, LLC**  
Broadcast Solutions

## Data Sheet

### Analog Routing Switchers



*The control panels shown with routers are for illustration purposes only and are priced separately.*

#### Key Features

- 16 x 1, 8 x 8, 8 x 16, 16 x 16, and 32 x 32
- Hot-swappable front-loading modules and power supplies
- Redundant power supplies available
- Flexible Ethernet, coax-based control
- Wide range of local or remote control panels
- Versatile RS232 interface

The RJM & Associates **INNOVATION** series of compact analog routing switchers is designed for the most demanding broadcast and professional users. Redundancy, reliability, and flexibility make these switchers ideal for critical path operations. The clean design reduces the number of potential failure points, and the full three-year warranty guarantees an effective life.

Based on rugged frame structures, each system has cells for optional back-up power supplies. All signal board cells in the frames are fully compatible with all analog signal formats, making field upgrades simple and cost effective.

Each router package includes a set of analog boards and universal power supplies. All boards can be added or exchanged while the equipment is in service, minimizing down time and increasing flexibility.

The Ethernet-based control architecture supports up to 32 control panels via a single coax line. The control system includes an RS232 interface with a very flexible protocol, allowing the interface to external controllers specific to the needs of the installation.

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### Typical Analog Video Specifications

Typical Analog Video Specifications	
<b>Video inputs:</b>	
Inputs:	8, 16 or 32
Impedance:	75Ω terminating
Coupling:	DC
Connector type:	BNC
Return loss:	40dB at 3.58 or 4.43mHz
Level:	1V p-p nominal, 2V p-p maximum
<b>Video outputs:</b>	
Number:	4 on 16x1 and 1 per bus on 8x8, 8x16, 16x16 and 32x32
Connector type:	BNC
Impedance:	75Ω, source terminated
Return loss:	35dB at 3.58 or 4.43mHz
Level:	1Vp-p nominal, 2Vp-p maximum
<b>Performance:</b>	
Gain:	Unity ±0.1 dB
Gain adj range:	±2dB. On the 16x1 only
V.I. switching:	Line 6 (NTSC)
Diff Gain:	0.1% 10 to 90% APL @ 3.58mHz and 4.43mHz
Diff phase:	0.1° 10 to 90% APL @ 3.58mHz and 4.43mHz
Freq response:	±0.1dB to 5mHz, -3dB bandwidth to 50mHz
Crosstalk isolation:	62dB to 5mHz worst case
Propagation delay:	5ns typical
In/In phase scatter:	±0.5%
In/In gain scatter:	±0.05% ref unity
DC offset:	<25mV
SNR:	-73dB, 5mHz bandwidth, 0.714Vp-p video to RMS noise

### Typical Analog Audio Specifications

Typical Analog Audio Specifications	
<b>Audio inputs:</b>	
Audio inputs:	8 or 16 dual (stereo) channels
Connector type:	Removable three pin Weco connector
Impedance:	20kΩ
Signal Level:	+26dBu, maximum
CMRR:	60dB to 1kHz
<b>Audio outputs:</b>	
Number:	One dual (stereo) on 16x1 and one dual (stereo) per bus on 8x8 and 16x16
Signal type:	Balanced
Connector type:	Removable three pin Weco connector
Impedance:	<30Ω
Level:	+26dBu, maximum
<b>Performance:</b>	
Freq. response:	±0.1dB to 20kHz, ref 1kHz
Crosstalk:	90dB @ 10kHz, worst case
DC offset:	<50mV
SNR:	<100dB, 20Hz to 20kHz
IM/THD:	< 0.02%
Electrical / Physical /Environmental	
<b>Electrical:</b>	
Input power:	Switch selectable 90 to 130VAC or 200 to 265VAC.
Frequency:	47 to 63 Hz.
Consumption:	16x1 20VA max, 8x8 25VA max, 16x16 50VA, 32x32 80VA max.
Compliance:	UL listed, CE, FCC-Part 15 class B
<b>Physical:</b>	
Dimensions:	16x1, 8x8, 8x16, 16x16 housed in 1RU frame 32x32 housed in 2RU frame
Weight:	16x1, 8x8, 8x16, 16x16 - 9 lbs, 4.0 kg CP Cradle w/panel - 6 lbs, 2.7 kg
<b>Environmental:</b>	
Operating temperature:	0 to 40° centigrade.
Humidity:	90% non-condensing.

**Your local RJM & Associates Distributor:**