

# INNOVATION By ISIS



The INNOVATION Super Switch series offers reliable performance on the road. Rugged design and compact size make them ideal for event management. The combination of flexibility, reliability, and great price cause the most demanding systems integrators, event managers, and users to choose ISIS. They trust ISIS support and full seven-year warranty to deliver solid results for years to come.

INNOVATION switchers are not broadcast routers adapted to multimedia applications, but are designed to meet the specific requirements of the multimedia industry. HD15 connectors, instead of the BNC connectors used by many, save space, connect to computers and peripherals without adaptors, and resist breaks. This improvement saves hours of setup time, makes installation easy, reduces risks, and improves system performance.

Each INNOVATION RGBHV switcher is based on a rugged frame design. Cells in each frame hold universal redundant power supplies. Hot swap any board or power supply from the front of the frame. Modular design and a wide range of sizes let users select the right configuration. Each switcher supports a local X-Y or multiple single bus remote control panels, or the INNOVATION graphical user interface (GUI). The RS232 protocol is designed to make external interfacing and customized control of the switchers simple, fast, and reliable. Applications include live events, permanent stadium and theater installations, command and control centers, and video wall switchers.

## RGBHV Routing Switchers: The Super Switch



**Wide  
Bandwidth**

### FEATURES:

- **Designed specifically for multimedia and presentation systems**
- **Cost-effective RGBHV, VGA to QXGA (2560 x 2048) switching**
- **Professional performance at any resolution**
- **Hot swap front-loading modules**
- **Flexible Ethernet and RS232 based control system**
- **Less than half the size and price of competing switchers**
- **Rugged construction to meet the demands of live events**
- **Standard system configurations of 8x8 and 16x16 (call for custom configurations)**
- **Analog or digital audio levels available for increased versatility**

**We take your success personally**

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Video/Audio Signal Management

# RGBHV Routing Switchers: The Super Switch

## Typical Video Specifications

### Video inputs:

Inputs:	8 or 16
Impedance:	75Ω, 0.1% terminating
Coupling:	DC
Connector type:	HD-15
RGB Level:	0.5V to 2V p-p maximum
HV Level:	0.5V to 3V p-p maximum

### Video outputs:

Number:	1 per bus
Connector type:	HD-15
Impedance:	75Ω, 0.1%, source terminated
RGB Level:	0.5V to 2V p-p maximum
HV Level:	0.5V to 3V p-p maximum

### Signal Integrity:

Gain:	Unity ±0.1 dB
Freq response:	±0.1dB to 5mHz, -3dB bandwidth to 400 mHz
Resolutions:	Supports all graphics standards: from VGA to QSXGA (2560x2048)
Slew rate:	500V/usec
Ringing amplitude:	1% overshoot maximum
Ringing duration:	<2ns
Horizontal tilt:	<0.25%
Vertical tilt:	<0.25%
Crosstalk isolation:	60dB to 10mHz
Propagation delay:	<5ns typical
In/In delay scatter:	±0.5ns
In/In gain scatter:	±0.05% ref unity
DC offset:	<25mV
SNR:	-70dB, 5mHz bandwidth, 1.0Vp-p video to RMS noise

## Typical Analog Audio Specifications

### Audio inputs:

Number:	8 or 16
Audio inputs:	Dual (stereo) channels (balanced or unbalanced)
Connector type:	Removable three pin Weco connector
Impedance:	20kΩ (600Ω input versions available)
Signal Level:	+26dBu, maximum
CMRR:	60dB to 1kHz

### Audio outputs:

Number:	One dual (stereo) (balanced or unbalanced) per bus
Signal type:	Balanced
Connector type:	Removable three pin Weco per output
Impedance:	<30Ω (600Ω version available)
Level:	+26dBu, maximum

### Performance:

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%

## Typical AES/EBU Audio Specifications

### AES/EBU inputs:

Number:	8 or 16
Connector type:	Removable three pin Weco
Impedance:	110Ω balanced, AC coupled
CMR:	±25V
Level:	0.5 to 10V p-p

### AES/EBU outputs:

Number:	1 per bus
Connector type:	Removable three pin Weco
Impedance:	110Ω balanced
Level:	4V p-p
Jitter:	< ±0.5ns p-p (+input jitter)

## Electrical / Physical / Environmental

### Electrical:

Input power:	Switch selectable 90 to 130VAC or 200 to 265VAC
Frequency:	47 to 63 Hz
Consumption:	8x8 10Va max, 16x16 25Va max
Compliance:	UL listed, CE, FCC-Part 15 class B

### Physical:

Dimensions:	8x8 housed in 1RU frame 16x16 housed in 2RU frame
Weight:	8x8 - 14 lbs (6.3 Kg) 16x16 - 22 lbs (9.9 Kg) Control panel cradle w/panel - 6 lbs (2.7 Kg)

### Environmental:

Operating temperature:	0 to 40° C
Humidity:	90% non-condensing

Your local ISIS Group Distributor: