

**HD/SDI/AES DIGITAL VIDEO MATRIX SYSTEMS - DAGGER SERIES**

Sigma's Dagger Series of digital matrix routers highlight an auto-sensing SD/HD video switcher module that provides equalization and reclocking. These practically designed systems are available in multiple level configurations that meet the needs of video and audio professionals in almost any environment.

Dagger series models are available in 8x8, 16x2 and 16x16 configurations in combinations that may include additional levels of HD, SDI and AES audio. All configurations are supplied with an appropriate control panel.

**FEATURES**

- Highest quality at an economic price
- 8x8, 16x2, or 16x16 SDI/HD (auto-sensing) models
- available
- Available in combinations that include HD, SD and/or
- AES audio
- Auto input equalization/output reclocking on HD models
- HSY16S, HSY162S or SYC88 control panel included
- Controlled via local control panel or via RS-232/422 port on System Controller
- Operates as a stand-alone router or as part of a Sigma 2100 switching system
- Can be configured as HD, HD/SDI and/or combined with AES audio levels

Prices and specifications are subject to change without notice

## SPECIFICATIONS

### VIDEO INPUT

Quantity/Connector	8 or 16, 75 BNC, terminated
Signal Type	SMPTE 259M, 344M, & 292M formats
Frequency	Up to 1.485 Gb/s
Normal Input Level	800 mVp-p $\pm$ 10%
DC Offset	0 $\pm$ 0.5V
Return Loss	> -20 dB (5 MHz to 540 MHz) > -18 dB (540 MHz to 1.485 GHz)
Equalization	Auto typ. max. equalized length of Belden 1694A cable: 270Mb/s - 350m (1150 ft.) 1.485Gb/s - 140m (450 ft.)

### VIDEO OUTPUT

Quantity/Connector	2, 8, or 16, 75 BNC, terminated
Signal Type	SMPTE 259M, 344M, 292M formats
Reclocking	Automatic
Return Loss	> -20 dB (5 MHz to 540 MHz) -18 dB (540 MHz to 1.485 GHz)
Output Amplitude	800 mVp-p $\pm$ 10%
Rise/Fall Time	270 Mb/s            400 - 1500 ps 1.485 Gb/s        <270 ps
Overshoot	< 10% of amplitude

### MECHANICAL/POWER

Power Consumption	Varies with configuration
Operating Temp.	32° F - 122° F (0° C - 50° C)

### AUDIO INPUTS

Quantity	8 or 16, transformer coupled
Conn/Imped:	BNC, 75 (AES3id-1995)
Signal Level:	1 Vp-p
CMR	7V peak from DC to 20 kHz
Max. Cable Length	1000 Ft. (Belden 1800A)

### AUDIO OUTPUTS

Quantity	8 or 16, transformer coupled
Conn/Imped	BNC/75 (AES3id-1995)
Signal Level:	1 Vp-p
Common Mode Noise	30 dB min. below signal from DC to 6 MHz
Isolation	50 dB min.

### AUDIO PERFORMANCE

Rise and Fall time:	5ns < tr < 30ns (10% & 90% level)
Jitter:	< +/- .20ns
Propagation Delay:	70nS nominal

### SYSTEM CONTROL INTERFACE

Data Transmission System	RS-232 & RS-422
Serial Port Baud Rate	Up to 38,400 baud
Control Levels	4, (follow mode w/ HSY16S control)
Communication Line	Coaxial, up to 2000 feet
External Sync Reference	Composite Sync or blackburst
Control Panel Addresses	Up to 16 on Comm. Line
Connectors	BNC for Comm. Line 9 Pin "D" for serial port

## MODELS AVAILABLE

Matrix Size	FORMAT		
	HD	SD	AES
16 X 16	HDVS1616-1	* DVQ1616	DES1616
16 X 2	HDVS1602	* DVQ1602	-----
8 X 8	HDVS88	* DVQ88	DES88

\* Optional 8- input reclocker available - Model # - DVOR-8

### SPECIAL COMBINATIONS

**HDVS1616-2: 16x16 DUAL HD & SDI MULTI-RATE w/ RECLOCKING ROUTING SYSTEM, 2RU**

**HDVS1616-3: 16x16 HD& SDI MULTI-RATE & 16X16 SDI w/ RECLOCKING ROUTING SYSTEM, 2RU**

**HDVS1616-4: 16x16 HD & SDI MULTI-RATE & 16X16 COAXIAL AES AUDIO ROUTING SYSTEM, 2RU**

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