

# CRESCENT - MD-X-X COST EFFECTIVE 16X1 HYBRID (HDMI+SDI) MULTIVIEWER

## Key Features

- Low latency - single frame processing delay
- Low Energy - only uses 15 W of power
- Accepts a combination of HDMI and SDI inputs
- Up to a total of 16 inputs in increments of 4 HDMI/SDI
- Windows can be sized and moved freely
- Decode up to 16 embedded audio per SDI input
- Decode up to 4 embedded audio per HDMI input
- Total of 64 audio meters
- 2 simultaneous and identical HDMI and SDI outputs
- Ethernet for configuration and external control
- Dynamic UMD/labels & Tallies (TSL)
- Stand alone labels, customizable logos
- 32 GPIs for tallies, count up/down triggers or alarms
- 2 digital and 2 analog clocks can be sync'd with LTC or NTP
- Borders can be turned on or off
- Safe area markers
- Visual Alarm tags for video/audio alarm detection
- Audio monitoring output - Stereo, AES, Embedded SDI and HDMI
- Optional redundant power supply
- 3 year limited warranty



## Accessories

### Standard

- Rack mount
- Type D to A HDMI cables
- 4 x RJ50 to DB9 for GPI
- 4 x breakout terminal blocks
- RJ45 to DB9 for serial
- Analog audio breakout cable
- CD (software, manual)

### Options

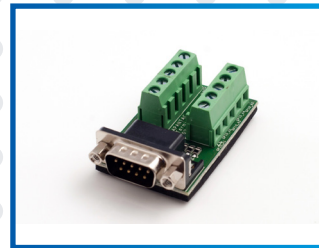
- Redundant power supply



RJ50-DB9: GPI Adapter



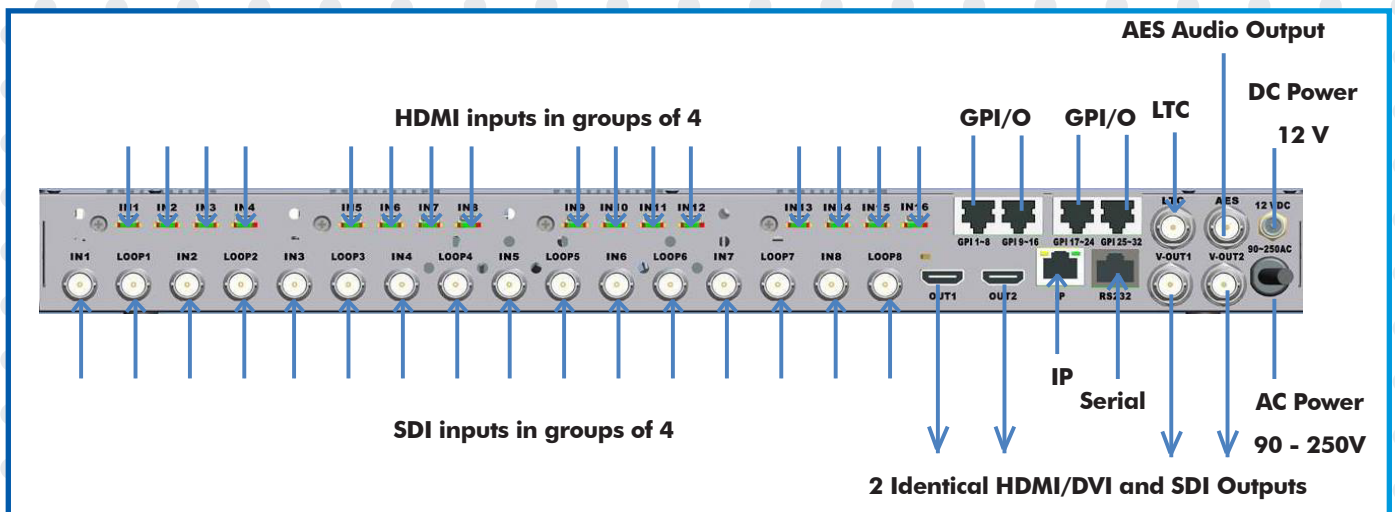
RJ45-DB9: RS232 Adapter



DB9 GPI Breakout



HDMI Type D to A Cable



# CRESCENT - MD-X-X+ (PLUS) COST EFFECTIVE DUAL OUTPUT (8+8) HYBRID (HDMI+SDI) MULTIVIEWER

## Key Features

- Low latency - single frame processing delay
- Low Energy - only uses 15 W of power
- Accepts a combination of HDMI and SDI inputs
- Up to a total of 16 inputs in increments of 4 HDMI/SDI
- Windows can be sized and moved freely
- Decode up to 16 embedded audio per SDI input
- Decode up to 4 embedded audio per HDMI input
- Total of 128 audio meters (64 meters per output)
- 2 separate independent outputs with 8 inputs each
- Simultaneous HDMI and SDI outputs
- Ethernet for configuration and external control
- Dynamic UMD/labels & Tallies (TSL)
- Stand alone labels, customizable logos
- 32 GPIs for tallies, count up/down triggers or alarms
- 2 digital and 2 analog clocks can be sync'd with LTC or NTP
- Borders can be turned on or off
- Safe area markers
- Visual Alarm tags for video/audio alarm detection
- Stereo analog audio monitoring output
- Optional redundant power supply
- 3 year limited warranty



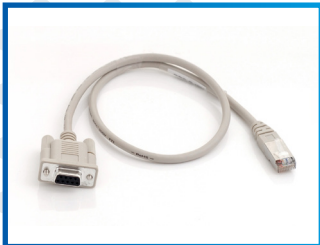
## Accessories

### Standard

- Rack mount
- Type D to A HDMI cables
- 4 x RJ50 to DB9 for GPI
- 4 x breakout terminal blocks
- RJ45 to DB9 for serial
- CD (software, manual)

### Options

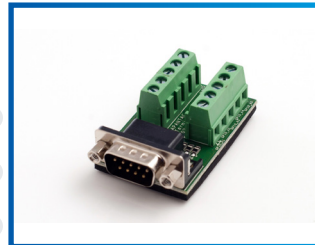
- Redundant power supply



RJ50-DB9: GPI Adapter



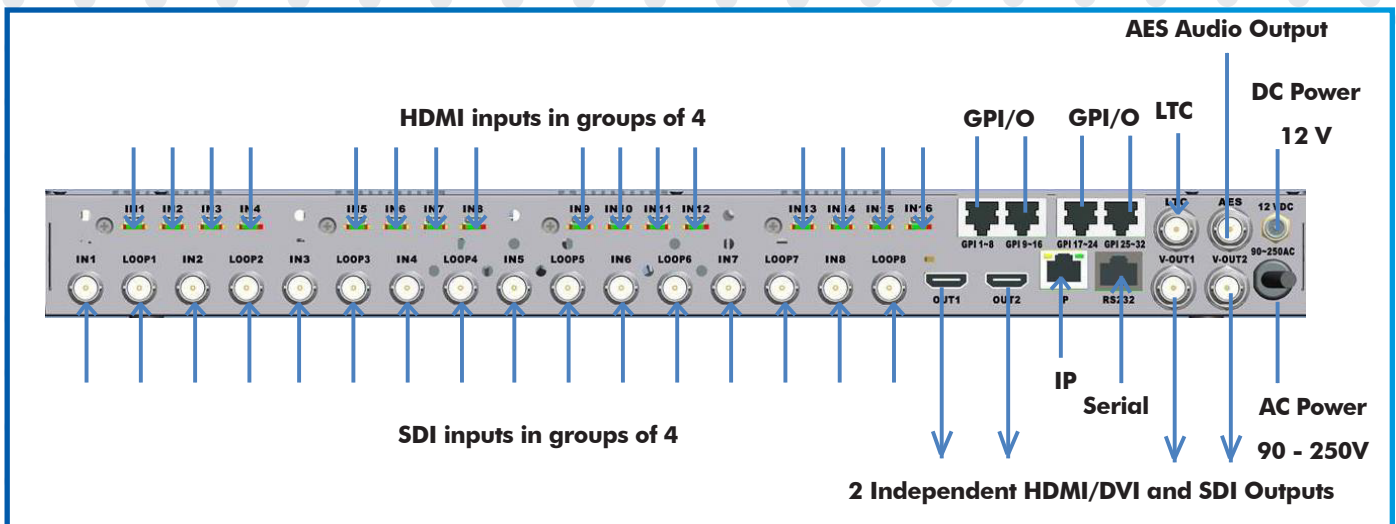
RJ45-DB9: RS232 Adapter



DB9 GPI Breakout



HDMI Type D to A Cable



# CRESCENT - MD-X-X# (SHARP) COST EFFECTIVE DUAL OUTPUT HYBRID (16X2) (HDMI+SDI) MULTIVIEWER

## Key Features

- Low latency - single frame processing delay
- Low Energy - only uses 15 W of power
- Accepts a combination of HDMI and SDI inputs
- Up to a total of 16 inputs in increments of 4 HDMI/SDI
- Every input can be duplicated up to 16 times
- Every input is available to both outputs
- Decode up to 16 embedded audio per SDI input
- Decode up to 4 embedded audio per HDMI input
- Total of 128 audio meters (64 meters per output)
- 2 independent outputs of HDMI and SDI
- Ethernet for configuration and external control
- Dynamic UMD/labels & Tallies (TSL)
- Stand alone labels, customizable logos
- 32 GPIs for tallies, count up/down triggers or alarms
- Built-in digital clocks can sync with LTC or NTP
- Borders can be turned on or off
- Safe area markers
- Visual Alarm tags for video/audio alarm detection
- Stereo analog audio monitoring output
- Optional redundant power supply
- 3 year limited warranty



## Accessories

### Standard

- Rack mount
- Type D to A HDMI cables
- 4 x RJ50 to DB9 for GPI
- 4 x breakout terminal blocks
- RJ45 to DB9 for serial
- CD (software, manual)

### Options

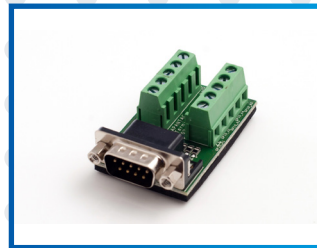
- Redundant power supply



RJ50-DB9: GPI Adapter



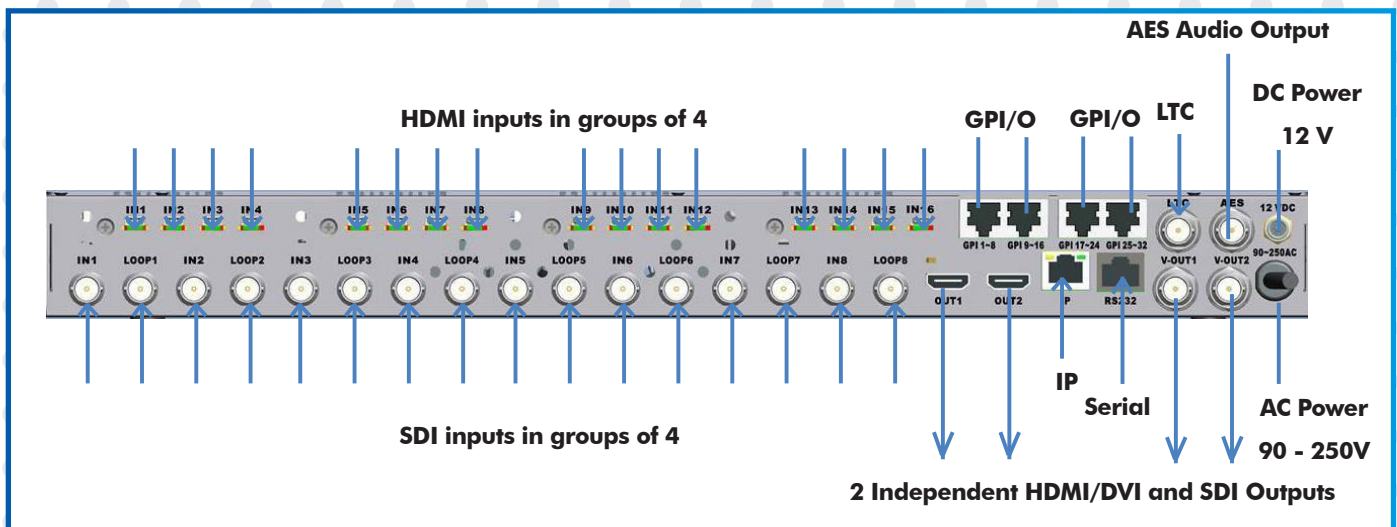
RJ45-DB9: RS232 Adapter



DB9 GPI Breakout



HDMI Type D to A Cable



<b>MD-X-X SPECIFICATIONS</b>			
<b>Inputs</b>	Combinations of HDMI and 3G/HD/SD-SDI	<b>Video Outputs</b>	2 identical DVI/HDMI, SDI
<b>HDMI Connectors</b>	HDMI Type-A Female	<b>Audio Outputs</b>	AES and Analog audio monitor outputs
<b>SDI Connectors</b>	BNC IEC 61169-8 Annex A	<b>Output Resolution</b>	1920 x 1080p 50/60Hz
<b>Total Windows</b>	16	<b>On Screen Display</b>	Borders, labels, tally UMD, OMD, IMD, dynamic UMD
<b>HDMI</b>	480P, 720P, 1080i, 1080P 50/60Hz	<b>General Purpose IO</b>	Up to 32 inputs with RJ50 - DB9 connectors
<b>Serial Digital</b>	SMPTE 424M, 292M, 259M	<b>Serial Port</b>	Connector: RJ45, Baud Rate up to 115200 Format, TSL, TSI, AXP
<b>HDMI Audio</b>	4 channels per input	<b>IP</b>	100 Base-Tx, TSL, AXP Connector: RJ45
<b>SDI Audio</b>	SMPTE-272M-A	<b>Electrical</b>	50W, 90-250V 50/60 Hz
<b>Alarms</b>	No audio, audio high/low, no video	<b>EMI/RFI</b>	Complies with FCC Part 15 Class A, CE, EU EMC, C-tick
<b>Power</b>	90-250 AC / 12 DC	<b>Size</b>	1 RU, 25 cm (10")

Available Models: MD-4-12(4 SDI+12 HDMI), MD-8-8(8 SDI+8 HDMI), MD-12+4(12 SDI+4 HDMI)

<b>MD-X-X+ SPECIFICATIONS</b>			
<b>Inputs</b>	Combinations of HDMI and 3G/HD/SD-SDI	<b>Video Outputs</b>	2 independent DVI/HDMI, SDI outputs
<b>HDMI Connectors</b>	HDMI Type-A Female	<b>Audio Outputs</b>	AES and Analog audio monitor outputs
<b>SDI Connectors</b>	BNC IEC 61169-8 Annex A	<b>Output Resolution</b>	1920 x 1080p 50/60Hz
<b>Total Windows</b>	16	<b>On Screen Display</b>	Borders, labels, tally UMD, OMD, IMD, dynamic UMD
<b>HDMI</b>	480P, 720P, 1080i, 1080P 50/60Hz	<b>General Purpose IO</b>	Up to 32 inputs with RJ50 - DB9 connectors
<b>Serial Digital</b>	SMPTE 424M, 292M, 259M	<b>Serial Port</b>	Connector: RJ45, Baud Rate up to 115200 Format, TSL, TSI, AXP
<b>HDMI audio</b>	4 channels per input	<b>IP</b>	100 Base-Tx, TSL, AXP Connector: RJ45
<b>SDI audio</b>	SMPTE-272M-A	<b>Electrical</b>	50W, 90-250V 50/60 Hz
<b>Alarms</b>	No audio, audio high/low, no video	<b>EMI/RFI</b>	Complies with FCC Part 15 Class A, CE, EU EMC, C-tick
<b>Power</b>	90-250 AC / 12 DC	<b>Size</b>	1 RU, 25 cm (10")

Available Models: MD-4-12+(4 SDI+12 HDMI), MD-8-8+(8 SDI+8 HDMI), MD-12-4+(12 SDI+4 HDMI)

<b>MD-X-X# SPECIFICATIONS</b>			
<b>Inputs</b>	Combinations of HDMI and 3G/HD/SD-SDI	<b>Video Outputs</b>	2 independent DVI/HDMI, SDI outputs
<b>HDMI Connectors</b>	HDMI Type-A Female	<b>Audio Outputs</b>	AES and Analog audio monitor outputs
<b>SDI Connectors</b>	BNC IEC 61169-8 Annex A	<b>Output Resolution</b>	1920 x 1080p 50/60Hz
<b>Total Windows</b>	32+	<b>On Screen Display</b>	Borders, labels, tally UMD, OMD, IMD, dynamic UMD
<b>HDMI</b>	480P, 720P, 1080i, 1080P 50/60Hz	<b>General Purpose IO</b>	Up to 32 inputs with RJ50 - DB9 connectors
<b>Serial Digital</b>	SMPTE 424M, 292M, 259M	<b>Serial Port</b>	Connector: RJ45, Baud Rate up to 115200 Format, TSL, TSI, AXP
<b>HDMI audio</b>	4 channels per input	<b>IP</b>	100 Base-Tx, TSL, AXP Connector: RJ45
<b>SDI audio</b>	SMPTE-272M-A	<b>Electrical</b>	50W, 90-250V 50/60 Hz
<b>Alarms</b>	No audio, audio high/low, no video	<b>EMI/RFI</b>	Complies with FCC Part 15 Class A, CE, EU EMC, C-tick
<b>Power</b>	90-250 AC / 12 DC	<b>Size</b>	1 RU, 25 cm (10")

Available Models: MD-4-12#(4 SDI+12 HDMI), MD-8-8#(8 SDI+8 SDI), MD-12+4#(12 SDI+4 HDMI)



# CRESCENT - MD-X-X# (SHARP) COST EFFECTIVE QUAD OUTPUT (32X4) MULTIVIEWER

## Key Features

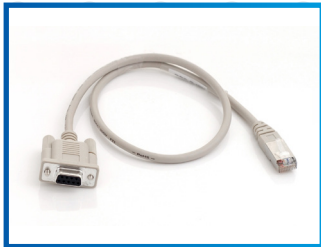
- Low latency - single frame processing delay
- Low energy - only uses 80 W of power
- Compact - 2RU
- Accepts a combination of HDMI and SDI inputs
- Up to a total of 32 inputs
- Every input can be duplicated up to 16 times
- Every input is available on all four outputs
- Decode up to 16 embedded audio per SDI input
- Decode up to 4 embedded audio per HDMI input
- Total of 256 audio meters
- 4 independent outputs of HDMI and SDI
- Ethernet for configuration and external control
- Two levels of GPI tally and three levels of serial tally
- Dynamic UMD/labels & Tallies (TSL)
- Stand alone labels, customizable logos
- 64 GPIs for tallies, count up/down triggers or alarms
- Built-in digital clocks can sync with LTC or NTP
- Borders can be turned on or off
- Safe area markers
- Visual Alarm tags for video/audio alarm detection
- Embedded HDMI or SDI audio for audio monitoring
- 3 year limited warranty



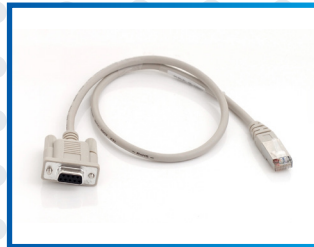
## Accessories

### Standard

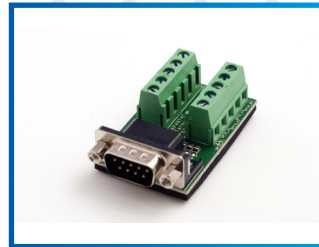
- Rack mount
- 16 x Type D to A HDMI cables
- 8 x RJ50 to DB9 for GPI
- 8 x breakout terminal blocks
- 2 x RJ45 to DB9 for serial
- CD (software, manual)



RJ50-DB9: GPI Adapter



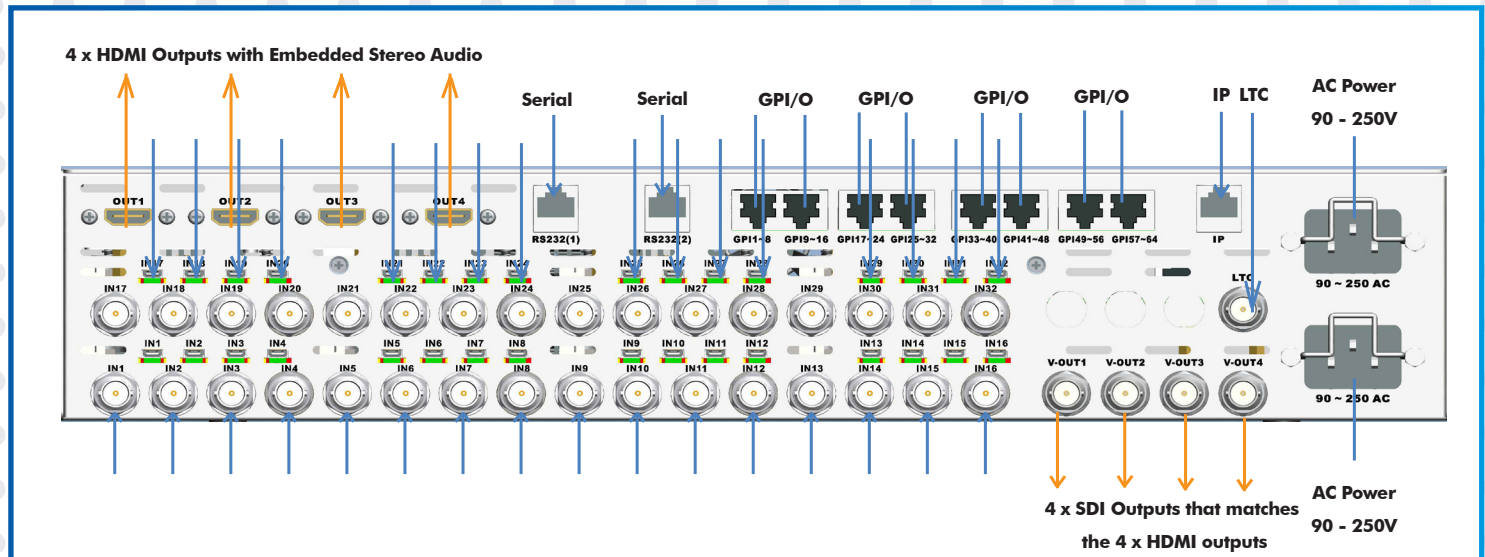
RJ45-DB9: RS232 Adapter



DB9 GPI Breakout



HDMI Type D to A Cable



<b>MD-X-X# SPECIFICATIONS</b>			
<b>Inputs</b>	Combinations of HDMI and 3G/HD/SD-SDI up to a total of 32 inputs	<b>Video Outputs</b>	4 independent DVI/HDMI, SDI outputs
		<b>Audio Outputs</b>	Embedded HDMI and SDI out
<b>HDMI Connectors</b>	HDMI Type-A Female		
<b>SDI Connectors</b>	BNC IEC 61169-8 Annex A	<b>Output Resolution</b>	1920 x 1080p 50/60Hz
<b>Total Windows</b>	Maximum of 128 Windows	<b>On Screen Display</b>	Borders, labels, tally UMD, OMD, IMD, dynamic UMD
<b>HDMI</b>	480P, 720P, 1080i, 1080P 50/60Hz	<b>General Purpose IO</b>	Up to 64 inputs with RJ50 - DB9 connectors
<b>Serial Digital</b>	SMPTE 424M, 292M, 259M	<b>Serial Port</b>	Connector: RJ45, Baud Rate up to 115200 Format, TSL, TSI, AXP
<b>HDMI audio</b>	4 channels per input	<b>IP</b>	100 Base-Tx, TSL, AXP Connector: RJ45
<b>SDI audio</b>	SMPTE-272M-A	<b>Electrical</b>	75W, 90-250V 50/60 Hz
<b>Alarms</b>	No audio, audio high/low, no video	<b>EMI/RFI</b>	Complies with FCC Part 15 Class A, CE, EU EMC, C-tick
<b>Power</b>	Redundant 90-250 AC	<b>Size</b>	2 RU, 48.5 cm (19")

<b>AVAILABLE MODELS</b>		
<b>MODELS</b>	<b>SDI Inputs</b>	<b>HDMI Inputs</b>
MD-16-16#	16	16
MD-20-12#	20	12
MD-24-8#	24	8
MD-28-4#	28	4