



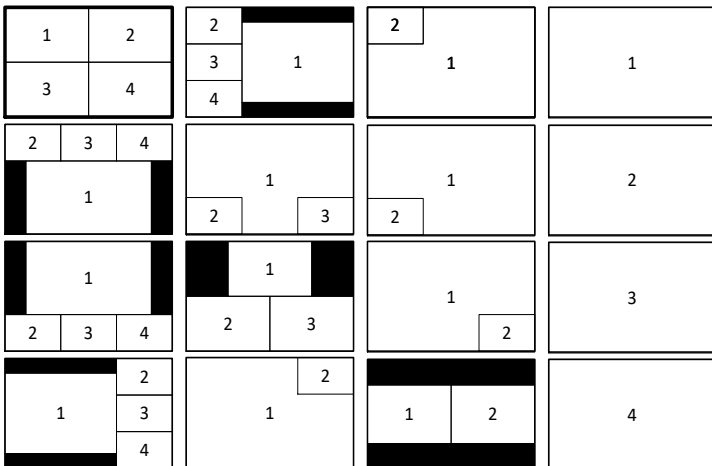
3-G SDI Quad Video Processor

Overview

The AVI's new 3-G SDI Quad Video Processor is a high-performance, stand-alone unit that combines four SDI video inputs into a dual SDI and DVI/HDMI video output for display.

Any combination of up to four SD, HD, or 3-G SDI video sources can be used as input. Low latency buffering allows non-synchronous input to be scaled and processed into a dual SD, HD, or 3-G SDI and DVI/HDMI outputs in real time.

Multiple display layout configurations are available as shown below.



Stand-alone or in combination with various AVI system components, AVI's rugged 3-G SDI Quad Video Processor offers a high-performance solution for display of all video sources, maximizing the capability of the sensor suite in use.

Standard Features

- 4 inputs to 1, 2, 3, or 4 outputs
- Multiple output screen formats
- 2 3G/HD/SD SDI output
- 1 DVI-D or HDMI output



- Inputs auto detected
- Selectable output resolution and frame rates
- Each input is independent
- Controllable aspect ratio for each quadrant
- Independent scaling of inputs and output
- On-screen user labels
- User controllable functions and configurations
- Ethernet interface for control and configuration
- 9 – 36 V DC Power
- Three year standard warranty

Benefits

- Increased Situational Awareness - all sensor sources viewable at the same time
- 3-G SDI Switch - simple selection of any single image or quad image using AVI system control components or embedded control software
- Reduction in wiring weight and complexity – only a single cable run needed to the display and additional displays not needed
- Allows single, unified SDI cabling infrastructure on sensor platform
- Open - works with any SDI/DVI/HDMI source/display

Typical Applications

- Air, Ground, and Marine Surveillance systems
- Air, Ground, and Marine Mission systems



AVI – Optimize your sensor

3-G SDI Quad Video Processor - Specifications

Video Inputs	<ul style="list-style-type: none"> • 3G/HD/SD SDI(4) • Input equalization > 100m (Belden 1694A) • Connector type – BNC 75 Ω 	Product Number	<ul style="list-style-type: none"> • Q000304-00
Video Outputs	<ul style="list-style-type: none"> • 3G/HD/SD (2) <ul style="list-style-type: none"> ○ Scaled ○ Re-clocked ○ 10 bit ○ Connector type – BNC 75 Ω • DVI-D/HDMI <ul style="list-style-type: none"> ○ DVI-D Female Sub-D Plated 	Environmental	<ul style="list-style-type: none"> • Operating Temp Low -45°C DO-160G Cat B2 • Operating Temp High +70°C DO-160G Cat B2 • Short Term Op Temp Low -45°C DO-160G Cat B4 • Short Term Op Temp High +70°C DO-160G Cat B4 • Ground Survival Low Temp -55°C DO-160G Cat B4 • Ground Survival High Temp +85°C DO-160G Cat B4 • Temp Variation 5C° per minute DO-160G Cat B • Humidity 38C° to 95@ 50C° DO-160G Cat A • Operational Shock 6g @ 11ms, 20G DO-160G Cat B • Vibration Random, 10-2000Hz DO-160G Cat U, U2 • Explosion Proofness* MIL-STD-810G Method 511.6 • Waterproofness Drip Test DO-160G Cat Y • Magnetic Effect DO-160G Cat A • Power Input* DO-160G Cat A • Voltage Spike 2x Line Voltage DO-160G Cat B • EMI/EMC Sec 18, 19, 20, 21 DO-160G Cat B, CC, R, M • ESD* DO-160G Cat A • Ingress Rating IP67 • Altitude Operating 50,000ft DO160G Cat D1
Video Input and Output Formats	<ul style="list-style-type: none"> • 3G – SMPTE 424M *Input only <ul style="list-style-type: none"> ○ 2.97 and 2.967Gb/s ○ 1080p@60/59.94*/50Hz ○ Format SMPT 425M Level A • HD – SMPTE 292M/274M/296M <ul style="list-style-type: none"> ○ 1.485 and 1.435Gb/s ○ 1080i@60/59.94*/50Hz ○ 1080p@30/29.97*/25/24/23.98*Hz ○ 720p @60/59.94*/50/30/29.97/25/24/23.98*Hz • SD – SMPTE 259M <ul style="list-style-type: none"> ○ 270Mb/s ○ 625i@50*Hz ○ 525i@59.94*Hz 	DO-160 Tested *By Similarity	
Functions	<ul style="list-style-type: none"> • Output selection of quad format • Output format (see video output formats) • Output aspect ratio of 16:9 • Input status of channel 1, 2, 3, and 4 and Channel Id overlay control • Input channel quadrant placement • Quad Boarder and color • Quad Boarder on/off 	Dimensions and Weight	<ul style="list-style-type: none"> • 182 mm [7.165 in] W, 117 mm [4.6 in] D, 42.8 mm [1.685 in] H • 0.786 kg [1.548lb]
		Power	<ul style="list-style-type: none"> • +9 to +36 DC • 0.25 amps • Connector Type MIL-STD D38999/20MB98PN

