

C2-6204

Multi-Window Processor

Key Features

- 4-Window Processor
- 4x High Quality CORIO®2 Scaling Engines
- 4x 3G SDI inputs with re-clocked loop-thru
- 4x Internal Still Image Stores
- 5th input (DVI-I/HDMI) for reference, background or cascading multiple units
- Parallel DVI-I/HDMI and 3G-SDI output
- Supports SDI and HDMI audio
- SDI support for SD/HD/3G-SDI 1080p@60Hz
- DVI-D I/O support to 1920x1200,1080p@60Hz
- DVI-A I/O support to 2048x2048, 1080p@60Hz
- Analog supports RGBHV, RGBS, RGsB, YPbPr
- 10 User-definable Presets for quick setup
- Motion Adaptive De-interlacing and Noise Reduction
- Audio monitoring via colored bars
- Color Borders and Source Labeling
- Variable Image Zoom to 10X and Shrink to 10%
- Per-pixel or Percentage Scaling Control
- Autoset - Automatic Analog Picture Sizing
- Chromakey, Lumakey, Genlock and Mix
- Front Panel includes LCD, Menu Control and Quick- Setup features
- Control via RS-232/RS-422/RS-485, Ethernet or Front Panel
- CORIOtools Suite compatible
- Optional modules (e.g. for Tally input/output)
- 1RU rack-mount case



Overview

C2-6204 4-Window 3G-SDI Processor is based on TV One's exclusive CORIO®2 technology and has four 3G-SDI inputs plus a DVI-I input (for window, cascade or background use) to place up to 4 sizeable windows on a single DVI-I / 3G SDI output. Each window is powered by a CORIO®2 scaler providing full PIP flexibility.

3G-SDI resolutions up to 1080p60 are supported. High performance de-interlacing with motion-adaptive noise reduction are available for interlaced SDI and YPbPr sources. The unit provides a DVI-I/HDMI output as well as a duplicate 3G-SDI capable output. SDI and HDMI audio can be embedded, switched or set to follow Window A only.

All settings are stored in non-volatile memory and are retained even when power is switched off. Ten user defined presets (controllable directly from the front panel or external communications) are also available to customize settings for various applications. A built-in LCD and menu system aids quick setup. Functions can be controlled via the front panel Push Buttons, RS-232/ RS-422/RS-485 or Ethernet.

Color borders and source labeling are also provided for each window. Four Still Image Stores are built into the unit which can each display one of ten user loadable graphic images to be used in place of an input. The 5th input is available for use as a window source, background to the 4 windows, or as a cascade input from another unit – thus adding 4 more windows per unit.

The CORIOtools Suite integrates fully with the unit and most third party control systems interface directly with the entire C2 range of products.

Variable Zoom to 10X allows you to enlarge any part of the graphic image to fill the entire computer screen and position controls allow you to move around to any area desired. Variable Shrink to as little as 10% allows fitting multiple images next to each other, with full positional controls.

Colored stereo audio bars are available for each window, and show the live audio activity of an SDI source.

Optional modules such as Tally I/O (with UMD support) and LTC Clock decode can also be fitted.

Advanced Features include Genlock, Chromakey, Lumakey and Mixing. The Key Mode allows any window to be keyed over any other with variable priority / layer control. The keyed image may be faded in and out.

The unit is housed in a 1RU case with rack mount ears provided and is powered from a standard 110-240v supply

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Specifications

Inputs			
Signal Type	4x 3G-SDI via BNC Connector 1x DVI-I/HDMI via DVI Connector		
SDI Format: 3G, HD, SD-SDI	Auto-detect: SD-SDI (SMPTE 259M-C) HD-SDI (SMPTE 392M) 3G-SDI (SMPTE 425M-A) with re-clocked loop through 1920x1080p 60Hz		
Max Resolution	1920x1080p@60Hz		
Digital DVI-D Format:			
Max HD Resolution	1920x1200@60Hz Reduced blnk		
Max PC Resolution	1080p@60Hz		
Analog DVI-A Format:			
Max HDTV Resolution	2048x2048		
Max PC Resolution	150KHz		
Max Horiz Scan Rate	RGBHV, RGBS, RGsB, YPbPr		
Signal Format	TTL Level, 10K Ω, Pos or Neg		
Sync	75Ω		
Termination	0.5-2.0 Vp-p		
R-G-B Level Range	Automatic		
Scan Rate Detection			
Output			
Signal Type	1x DVI-I/HDMI via DVI-I Connector 1x 3G-SDI via BNC Connector		
SDI Format: 3G, HD, SD-SDI	SD-SDI (SMPTE 259M-C) HD-SDI (SMPTE 392M) 3G-SDI (SMPTE 425M-A)		
Digital DVI-D Format			
Max HD Resolution	1080p@60Hz		
Max PC Resolution	1920x1200@60Hz		
Analog DVI-A Format			
Max HDTV Resolution	1080p@60Hz		
Max PC Resolution	2048x2048		
Vertical Refresh Rate	Any to 250Hz		
Signal Format	RGBHV, RGBS, RGsB, YPbPr		
R-G-B Level	0.7 Vp-p		
General			
Size and Position	Automatic via AutoSet or Manual		
Image Size	User-Definable Presets		
Image Freeze	One Video Frame		
Settings Memory	Non-Volatile		
Shrink Range	Variable to 10%		
Image Mirroring	Horizontal and/or Vertical		
Zoom Range	Variable to 10X Zoom		
Horizontal Filtering	Full Digital		
YPbPr de-interlacing	Motion adaptive + noise reduction		
Analog Video Adjust	R-G-B levels Contrast, Phase		
Film Mode (525i/1080i)	3:2 Pull Down Detection		
Conversion Technology	Proprietary – CORIO®2		
Frame Rate Conversion	Frame add/drop		
Color Resolution	24-bit (16.8 Million Colors)		
Sampling Rate	162MHz		
Digital Sampling	24-bit, 4:4:4 format		
Firmware Memory	Flash, Upgradeable via RS-232		
Analog Video Adjust	R-G-B Levels Contrast, Phase		
Control Methods			
Local	via Front Panel Buttons & LCD		
RS-232/RS-485/RS-422	via D9 Female Connector		
Ethernet (TCP/IP)	RJ45		
Tally module (optional)	Tally and UMD support		
Warranty			
Limited Warranty	5 Years Parts and Labor		
Regulatory Compliance			
Main Units	FCC, CE, RoHS		
Power Supply	UL, CUL, CE, PSE, GS, RoHS		
Mechanical			
Desktop Case (HWD)	44x420x200mm (1.75"x17"x7.9")		
With Rack Ears (HWD)	44x482x200mm (1.75"x19"x7.9")		
Weight (Net)	3.08kg / 6 lbs 13 oz		
Environmental			
Operating Temperature	0° to +50° C (+32° to +122° F)		
Operating Humidity	10% to 85%, Non-condensing		
Storage Temperature	-10° to +70° C (+14° to +158° F)		
Storage Humidity	10% to 85%, Non-condensing		
Power Requirement			
Internal Power Supply	100-240VAC, 50-60Hz, 50W		
Power Consumption			
Maximum load	29-watts		
Thermal Dissipation			
Maximum output	98-BTU/Hr		
Ambient Noise			
Sound Pressure Level	36dB (A) @ 1 m		
Accessories Included			
1 x AC Power Cord	6' (2m) US, UK, Euro or AU		
1 x VGA to DVI Adapter	ZDH-2040		
1 x Operations Manual			
1 x Rack mount Kit	2 Ears and 4 Screws		
1 x Control Software	Downloadable from website		
Product Item Numbers			
C2-6204	3G-SDI Multiviewer		
Optional Accessories			
CMD1941	DVI Male to HDMI Female		
RM110	Rear rack rail for 24" to 32" deep racks		
ZDH-2038	DVI-I Male to 5-BNC Female		
ZDH-2040	DVI-I Male to VGA Female		
C2M-TALLY	Tally / UMD module		

Panel Drawings

