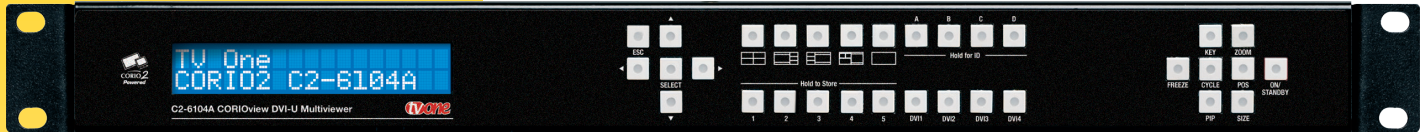# CORIOview C2-6104A

4 Window DVI-U Video Processor

Key Features C2-6104A

- 4-window Processor
- 4 high quality CORIO®2 scaling engines.
- 5 DVI-U inputs
- 5th input for reference, background or cascading multiple-units
- 4x Internal Still Image Stores
- DVI-D I/O support to 1920x1200, 1080p@60Hz
- DVI-A I/O support to 2048x2048, 1080p@60Hz
- Analog Input supports RGBHV, RGBS, RGsB, YPbPr, CV
- 10 user-definable presets
- Motion adaptive de-interlacing & noise reduction for YUV & YPbPr inputs
- Color borders and source labeling
- Zoom up to 10X with Full Positioning
- Image Shrink to 10% with Full Positioning
- Per-pixel or percentage scaling
- Autoset - Automatic analog picture sizing
- Chromakey, Lumakey, Genlock & 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 I/O)
- 1RU rack-mount case

CORIOview C2-6104A 4-Window DVI-U Processor is based on tvONE's exclusive CORIO®2 technology and has five DVI-U inputs (DVI-U is the same as a DVI-I connection but with the additional flexibility of accepting Composite video signals) to place up to 4 sizeable windows on a single DVI-I output (one input is provided for cascade or background usage only). Each window is powered by a CORIO®2 scaler providing full PIP flexibility.

DVI-D resolutions up to 1920x1200@60Hz and 1080p are supported along with analog DVI-A (RGBHV/YUV/ YPbPr/CV via optional HD-15 or BNC breakout adaptor) resolutions up to 2048x2048 at virtually any refresh rate. Virtually all computer signal formats are accommodated. High performance de-interlacing with motion-adaptive noise reduction provides input compatibility with YUV, YPbPr and CV sources such as 525i, 625i, 720p, 1080i and 1080p. Custom resolutions can also be added quickly and easily using available software.

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 background to the 4 windows, or as a cascade input from another CORIOview unit – thus adding 4 more windows per unit.

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.

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. Due to the 4:4:4 sampling format, precise keying at the pixel level can be achieved.
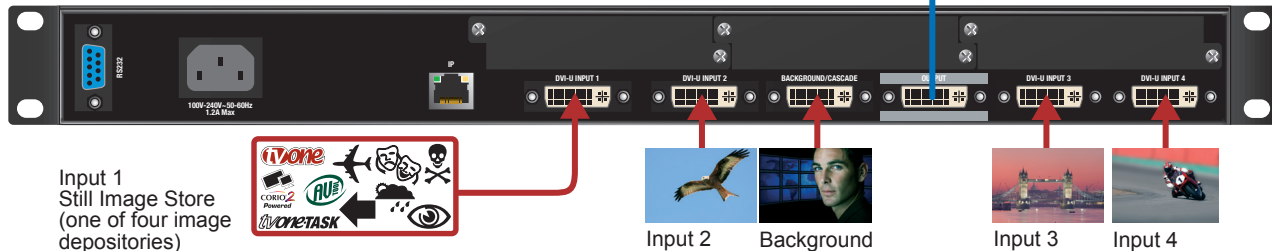
CORIOtools Suite integration

The CORIOtools Suite integrates fully with both the CORIOview C2-6204 and C2-6104A. Amongst its many useful applications is the ability to visually label each input. This allows the operator to keep track of which window relates to which input - particulary useful when cascading units. Optional modules such as Tally I/O (with UMD support) can also be fitted.

Still Image Store

The CORIOview Multiviewers have four Still Image Stores which can each display one of ten user loadable graphic images in place of an input. A stored user image such as a custom logo or test card can be keyed, scaled and positioned over the full screen image. Keyed images can be faded in and out, and due to its 4:4:4 sampling format, precise keying at pixel level can be achieved.

In the example to the right, input 1 has been used to insert a keyed logo from one of the units four Still Image Stores.

Input 1
Still Image Store
(one of four image depositories)

Input 2   Background   Input 3   Input 4

C2-6104A Specifications

Inputs
Signal Type	5x DVI-U via DVI-I Connector

Digital DVI-D Format:
Max HD Resolution	1080p@60Hz
Max PC Resolution	1920x1200@60Hz

Analog DVI-A Format:
Television Standards	NTSC, PAL, PAL-M, PAL-N, SECAM
Max HDTV Resolution	1080p@60Hz
Max PC Resolution	2048x2048
Max Horiz Scan Rate	150KHz
Signal Format	RGBHV, RGBS, RGsB, YPbPr, CV
Sync	TTL Level, 10KΩ, Pos or Neg
Termination	75Ω
R-G-B Level Range	0.5-2.0 Vp-p
Scan Rate Detection	Automatic

Output
Signal Type	1x DVI-I via DVI-I Connector

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

Audio
Embed / De-Embed	HDMI - via DVI connector

General
Size and Position	Automatic via AutoSet or Manual
Image Size	User-Definable Presets
Image Freeze	One Video Frame
Settings Memory	Non-Volatile
Zoom Range	Variable to 10X Zoom
Shrink Range	Variable to 10%
Image Mirroring	Horizontal and/or Vertical
Horizontal Filtering	Full Digital
YPbPr de-interlacing	Motion adaptive + noise reduction
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
DVI I/O	HDCP Compliant
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

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)	44x432x200mm (1.75"x17"x7.9")
With Rack Ears (HWD)	44x482x200mm (1.75"x19"x7.9")
Weight (Net)	3 Kg (6.5 lb)

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

Accessories Included
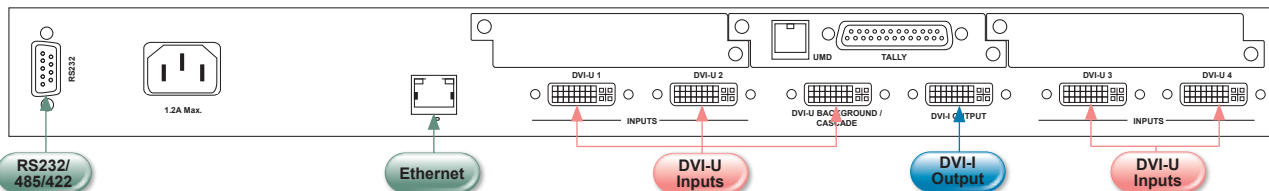|	
1x AC Power Cord	6' (2m) US, UK or Euro
1x VGA to DVI Adapter	ZDH-2040
1x BNC to DVI Adapter	ZDC-2050
1x Operations Manual	
1x Rack mount Kit	2 Ears and 4 Screws
1x Control Software	Downloadable from website

Product Item Numbers
CORIOview C2-6104	Quad-PIP DVI-U Scaler

Optional Accessories
RM110	Rear rack rail supports for 24" to 32" deep racks
ZDH-2038	DVI-I Male to 5-BNC Female
ZDC-2050	DVI-A to BNC Female
ZDH-2040	DVI-I Male to VGA Female
C2M-TALLY	Tally/UMD module

Control Interface   Input   Output   Input/ Output

C2-6104A (shown with optional module fitted)

RS232/ 485/422   Ethernet   DVI-U Inputs   DVI-I Output   DVI-U Inputs