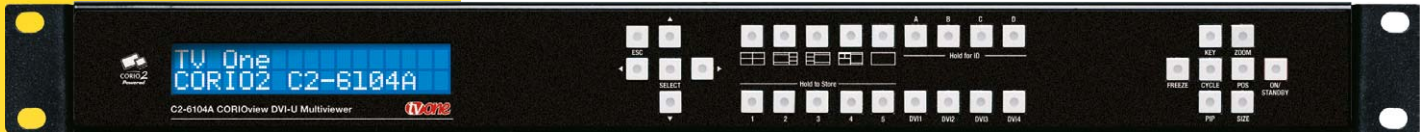


# CORIOview C2-6104A

## 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 TV One'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.

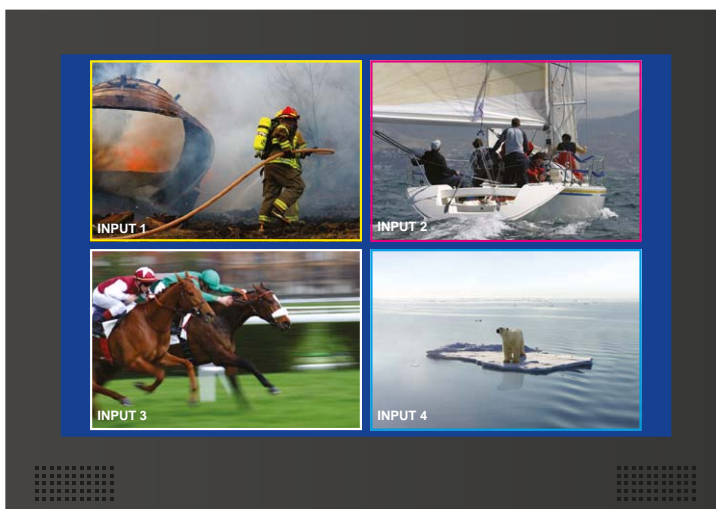
Color borders and source labeling are also provided for each window. Four Still Image Stores are built into the unit which can each display one of ten user loadable graphic images to be used in place of an input. The 5th input is available for use as a background to the 4 windows, or as a cascade input 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 - particularly useful when cascading units. Optional modules such as Tally I/O (with UMD support) can also be fitted.



## Multiviewers

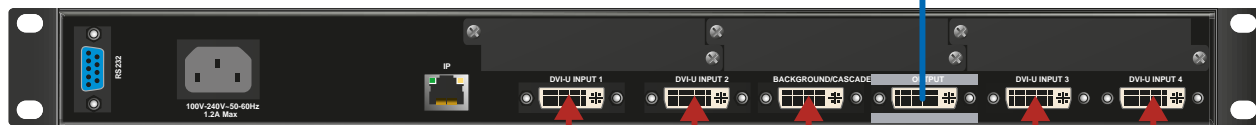
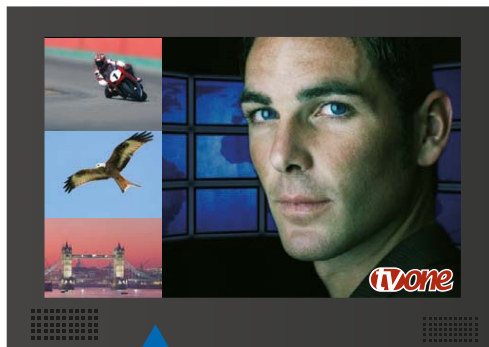
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## Still Image Store

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

2 Ears and 4 Screws

#### 1x Rack mount Kit

Downloadable from website

#### 1x Control Software

Quad-PIP DVI-U Scaler

### Product Item Numbers

#### CORIOview C2-6104

### 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

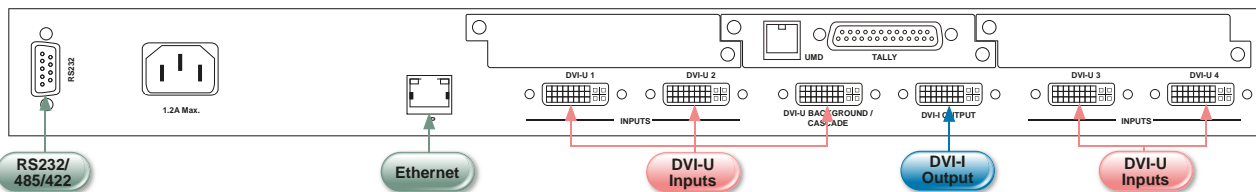
Control Interface

Input

Output

Input/Output

C2-6104A (shown with optional module fitted)



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**CORIO2**  
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**WFX**  
NEW PRODUCT AWARDS  
2009

C2-6104  
WFX 2009  
Best Video  
Processor  
Award

**AV**  
WINNER

C2-6104  
2010 AV Awards  
Systems Product  
of the Year



# CORIOview C2-6204

## 4 Window 3G-SDI Multiviewer



### Key Features C2-6204

- 4-window Processor
- 4 high quality CORIO@2 scaling engines.
- 4 3G-SDI inputs with re-clocked loop through
- 5th input (DVI-I) for 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
- SDI Output support, SD/HD/3G
- Analog supports RGBHV, RGBS, RGsB, YPbPr
- 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
- Up to 4 stereo audio bars with color graduations available per window.
- 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 C2-6204 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 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 1080P/60 are supported. High performance de-interlacing with motion-adaptive noise reduction are available for interlaced sources. The unit provides a DVI-I output as well as a duplicate 3G SDI capable output.

All settings are stored in a non-volatile memory and are retained even when power is switched off. A built-in LCD and menu system aids quick setup allowing functions to be controlled via the front panel Push Buttons, or alternatively via RS-232/ RS-422/RS-485 or Ethernet.

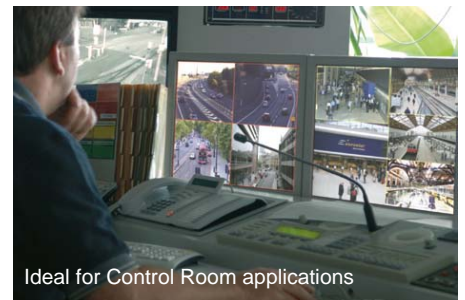
Variable Zoom to 10X allows you to enlarge any part of the graphic image to fill the entire computer screen and position controls allow you to move around to any area desired. Variable Shrink to as little as 10% allows fitting multiple images next to each other, with full positional controls.

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.

Each window can also have audio bars present, showing the activity of any audio in the SDI source signal. Up to 4 stereo audio bars may be displayed in each window. Different colors show activity at certain amplitudes of signal.

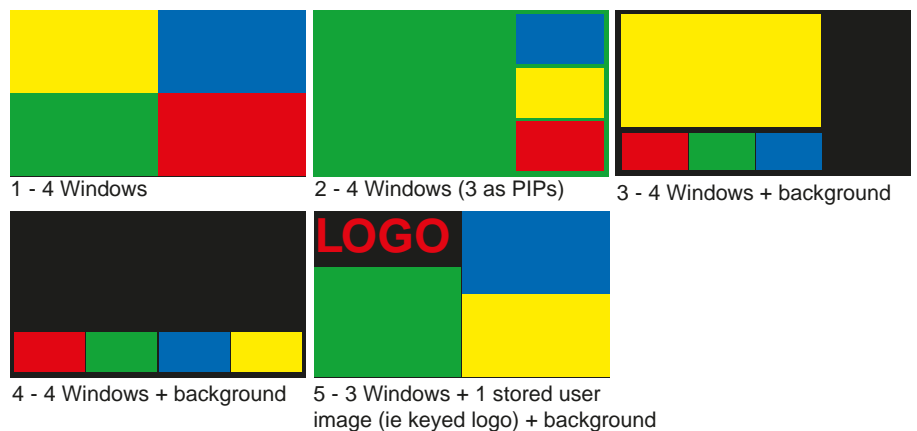
### User-defineable Presets

Ten user defined presets (controllable directly from the front panel or external communications) are available to customize settings for various applications. The 4 scaleable windows can be positioned and layered anywhere on the output monitor. Colored borders and source labelling 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 fifth input can be used for a background color, unscaled video or for cascading.



Ideal for Control Room applications

### Preset Examples



1 - 4 Windows

2 - 4 Windows (3 as PIPs)

3 - 4 Windows + background

4 - 4 Windows + background

5 - 3 Windows + 1 stored user image (ie keyed logo) + background

## Multiviewers

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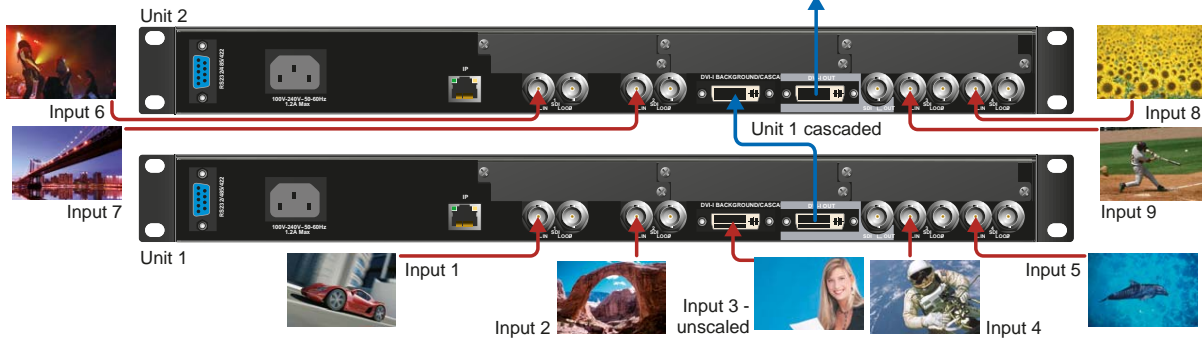
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## Cascading 2 or more units

Several CORIOview Multiviewer units can be cascaded together to expand the number of images displayed. This example shows the combination of two units to provide eight scaled and positioned images from eight separate sources over an unscaled background.

In cascading the output from Unit 1 is fed into the Background/cascade input of Unit 2



### C2-6204 Specifications

#### Inputs

##### Signal Type

4x 3G SDI via BNC Connector  
1 x DVI-I via DVI Connector (5th input)

##### SDI Format:

3G, HD, SD SDI SMPTE 259M, SMPTE 392M, SMPTE 425M with re-clocked loop through

##### 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  
Max Horiz Scan Rate 150KHz  
Signal Format RGBHV, RGBS, RGsB, YPbPr  
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  
1 x 3G SDI via BNC Connector

##### SDI Format:

3G, HD, SD SDI SMPTE 259M, SMPTE 392M, SMPTE 425M

##### 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 SDI / 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  
YPbPr de-interlacing  
Film Mode (525/1080i)  
Conversion Technology  
Frame Rate Conversion  
Color Resolution  
Sampling Rate  
Digital Sampling  
DVI I/O  
Firmware Memory  
Analog Video Adjust  
On Screen Display

#### 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) 3.1Kg (6.8 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  
2x VGA to DVI Adapters TBC  
1x Operations Manual  
1x Rack mount Kit 2 Ears and 4 Screws  
1x Control Software Downloadable from website

#### Product Item Numbers

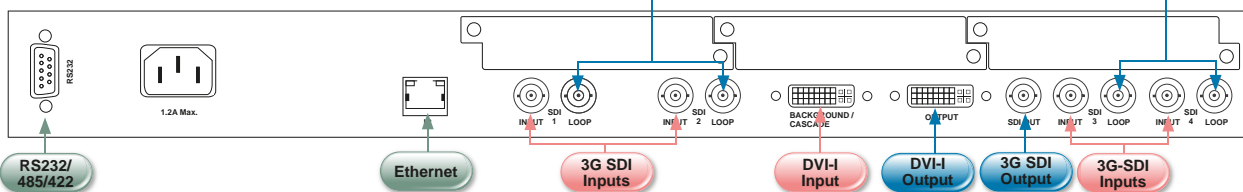
CORIOview C2-6204 3G SDI Multiviewer

#### Optional Accessories

ZDH-2038 DVI-I Male to 5-BNC Female  
ZDH-2040 DVI-I Male to VGA Female  
C2M-TALLY Tally/UMD module



C2-6204



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