Multi Window Video Processors
Control Room Applications

The C2-6104A is a very capable Control room Multiviewer. With very low latency and per-pixel scaling the unit is ideal for any CCTV or Broadcast environment. The unit's flexible windowing capabilities allow sources to be viewed either as a full screen or in a multi-window layout. The five HDCP compatible DVI-U inputs allow integration of both digital, and analog standards including CV, YC and YPbPr, making it easy to integrate legacy components. Up to fifty layouts can be easily stored and recalled as presets, making the unit simple setup for different applications. The 'Cascade' feature enables the C2-6104A to be expanded, increasing the number of sources to be monitored. It is fully compatible with the 3G-SDI variant C2-6204, making it easy to mix HDMI/DVI, Analog video and Broadcast quality SDI all on one display. An optional 'Tally' I/O module allows TSL 3.1 UMD (Under Monitor Display) window labeling and ensures compatibility with studio equipment; it also has eight configurable general purpose I/Os which can be used to trigger specific actions. Special features: Genlock the output to any incoming reference source; add colored borders to differentiate windows; add customizable and UMD labeling to identify sources; general purpose I/O triggered internal and external events such as presets, flashing borders and text and control system interaction. The C2-6104A is easy to integrate with Control room systems, as it supports full functionality via its API allowing 3rd party remote management and configuration.

Conference Room Applications

Used as a presentation switcher with Multiviewer capabilities, the C2-6104A is ideal for small to medium sized meeting rooms. Up to five video sources can be viewed either as a full screen, as with a conventional switcher or with multiple windows for PIP and layered montage effects. Internally stored images can be used as corporate branding or keyed out to create logos. Transitions can be customized to create different effects when switching between sources, either Fade for smooth switching or Push and Wipe for more impact. Layouts can be easily stored and recalled as presets, making the unit simple to reconfigure during presentations or between meetings. Up to fifty presets can be stored which can be very useful when implementing the unit into a multifunctional meeting room that may be used for many different purposes. Special features include: Autoset, when activated will automatically center the image when analog graphics sources are connected; five fully HDCP compatible Universal DVI inputs make integrating new and legacy sources easy; audio routing with APV or breakaway on all sources. The unit has a small footprint so is ideal for integration where rack space is an issue such as in a desk, credenza or lectern. Easy to integrate with control systems; the C2-6104A supports full functionality via its API for remote access.

Easily connect legacy sources via a range of Universal DVI connectors
Medical Applications

With extremely low latency and acclaimed scaling, the C2-6104A is the ideal Multiviewer for medical environments where precision, image quality and signal integrity are key. The exclusive CORIO2 scaling engines at the heart of the unit enable extremely high quality 24-bit, 4:4:4 format processing while maintaining a maximum of only 1 – 2 frames delay. Sources can be viewed individually or part of a montage showing all sources at once. Screen Layouts can be simply created and recalled as presets, making the unit easy to setup prior to being used or adjusted during medical procedures optimizing the unit's functionality. The five DVI-U inputs allow integration of both digital, and analog standards such as CV, YC and YPbPr, making it easy to integrate expensive legacy components such as endoscopes or imaging equipment. Special features: Up to fifty presets available; create layouts with up to four PiPs and a full background; add a colored border to each window to highlight specific sources; customizable window labeling to identify signals; Zoom in and freeze specific live video streams to highlight areas of interest. The C2-6104A's small footprint and exceptionally low power consumption (approx. 20w) means it has a very small impact when integrating into an equipment rack or communications closet. Combined with its numerous regulatory compliances and extremely flexible functionality this makes it an ideal processor to integrate into any medical AV system.

Classroom Applications

The C2-6104A can be placed at the center of the classroom system and used as the main AV switcher. Its conveniently small 1RU chassis makes it easy to fit into a lectern or desk with very little impact on space or ventilation. The C2-6104A's flexible windowing capabilities allow the sources to be viewed either as a single full screen or in a multi-window layout. Layouts can be easily stored and recalled as presets, making the unit simple to reconfigure during presentations or between lessons. An optional 'Tally' I/O module has eight configurable general purpose I/Os which can be used to trigger internal and external events such as stored presets or projection screen and environmental controls. Special features include: independently zoom in and highlight areas of interest on specific windows; freeze each window independently to pause or temporarily capture an image as a point of reference; use up to four of the ten internally stored images, these could be simple reference images to compliment live training material or a school emblem that can be keyed and used as a logo; Autoset for centering analog sources. The C2-6104A's flexible five DVI-U inputs allow integration of digital HDMI or DVI and older analog standards including CV, YC and YPbPr, making it easy to integrate legacy sources and negating the need to upgrade existing equipment. Used independently or integrated into a larger system, the C2-6104A is the ideal solution for displaying audio visual content in an educational environment.
Specifications

**C2-6104A**

**Inputs**
- Signal Type: 5x Universal DVI via DVI-I Connector
- Digital DVI-D Format:
  - Max HD Resolution: 1920x1200@60Hz
  - Max PC Resolution: 2048x2048
- Analog DVI-A Format:
  - Max HD Resolution: 1080p@60Hz
  - Max PC Resolution: 2048x2048
- Max Horiz Scan Rate: 150KHz
- Signal Format: RGBHV, RGBS, YPbPr, CV
- Sync: TTL Level, 10KΩ, Pos or Neg
- Termination: 75 Ω
- R-G-B Level Range: 0.7 Vp-p
- Scan Rate Detection: Automatic

**Outputs**
- Signal Type: 1x DVI-I via DVI-I Connector
- Digital DVI-D Format:
  - Max HD Resolution: 1080p@60Hz
  - Max PC Resolution: 2048x2048
- Analog DVI-A Format:
  - Max HD Resolution: 1080p@60Hz
- Max Horiz Scan Rate: 150KHz
- Signal Format: RGBHV, RGBS, 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
- Zoom Range: Variable to 10X
- 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
- On Screen Display: 4 Stereo audio level bars per window

**Audio**
- Embed / De-Embed: HDMI - via DVI connector

**C2-6204**

**Inputs**
- Signal Type: 4x 3G SDI via BNC Connector
- SDI Format: SMPTE 259M, SMPTE 392M, SMPTE 425M with re-clocked loop through
- Digital DVI-D Format:
  - Max HD Resolution: 1920x1200@60Hz
- Analog DVI-A Format:
  - Max HD Resolution: 1080p@60Hz
- Max PC Resolution: 2048x2048
- Max Horiz Scan Rate: 150KHz
- Signal Format: RGBHV, RGBS, YPbPr
- Sync: TTL Level, 10KΩ, Pos or Neg
- Termination: 75 Ω
- R-G-B Level Range: 0.5-2.0 Vp-p
- Scan Rate Detection: Automatic

**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
- 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
- On Screen Display: 4 Stereo audio level bars per window

**Audio**
- Embed / De-Embed: SDI - via DVI connector

**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 Rack mount Kit: 2 Ears and 4 Screws
- 1x Control Software: Downloadable from website

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

**Product Item Numbers**
- CORIOview C2-6104A: Quad-PIP Universal DVI Scaler
- CORIOview C2-6204: 3G SDI Multiviewer
- CORIOview C2-6104A†
- CORIOview C2-6204*