CORIO® master
All-in-one creative versatile video experiences

The world’s most advanced family of video processors providing the ultimate creative video experience. CORIOmaster systems offer anything in, anything out capability in glorious, eye-popping 4K quality.
**Powerful Performance and Features**

CORIO master is a modular 4K video processor with high quality CORIO scaling across 4 video walls. Mixed input resolutions, pixel perfect window placement, source and screen orientations, bezel adjustment, edge-blending and customizable output resolutions all contribute to CORIO master being the most flexible video wall processor platform available. CORIO master manages four display canvases while simultaneously sharing sources across the canvases.

**Versatile – manage four simultaneous video walls**

2x2 Video Wall  
2x3 Video Wall  
Rotation Video Wall  
Edge-Blended Wall

**Source & Display Flexibility**

Using edge-blending, bezel compensation and a user defined display library, our creative and powerful video experiences give you the WOW factor. Adding to creativity, CORIO master allows multiple video windows that can be positioned, resized and rotated in 1º increments. Using edge-blending, bezel compensation and a user defined display library, our creative and powerful video experiences give you the Wow factor! Adding to creativity, CORIO master allows multiple video windows that can be positioned, resized and rotated in 1º increments.

**Design Simplicity**

CORIO grapher is the creative video wall software for CORIO master. CORIO master mini and CORIO master micro Design walls offline or online and connect to multiple video walls. Define your displays and video windows precisely to your desired size (mm/in) and save to your library for later use. Also mix streaming video with 4K files and still images into a single playlist. For LED walls, switch to pixel mode to enable the exact mapping of your content. The software’s real-time dashboard view allows for instant triggering of multi-window presets and transitions of which up to fifty can be stored and controlled.

**Input & Output Modules**

CORIO master can easily be populated with input and output modules to match your source and display requirements.

- **Dual 3G-SDI broadcast input module**
  - Supports resolutions up to 1080p/60

- **Dual HD-SDI broadcast input module**
  - Supports resolutions up to 1080p/60

- **Dual 4K HDMI input module**
  - Supports resolutions up to 4096 x 2160
  - 100BaseT input for control applications
  - Pair with tvONE’s Magenta HD-ONE HDBaseT Transmitter for 150m reach - guaranteed over Cat6 cable!

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  - Supports resolutions up to 4096 x 2160
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- **Dual HDMI Universal input module**
  - Supports resolutions to 1080 x 1200/60p
  - Supports HDMI, DVI-I, HD15/VGA, YC (S-video) & analog (RGBHV or YPbPr) using DVI-U adapters

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  - Supports resolutions to 1080 x 1200/60p
  - Supports HDMI, DVI-U, HD15/VGA, YC (S-video) & analog (RGBHV or YPbPr) using DVI-U adapters

- **Dual DVI Universal input module**
  - Supports resolutions to 3840 x 2160/30p

**DVI Adapters**

- HDMI
- CV
- Analog PC
- YC (S-Video)
- Analog RGBHV
- YPbPr/YYUV

**Support Services**

The tvONE support team is available to support you from system design to installation and a full after care service.

**Support**

- Our experienced support engineers are available to help.
- Get in touch by phone, email or request a site visit.
- Zero license fees or recurring costs of maintenance and software upgrades.
- Access to comprehensive knowledge database and a support ticketing system.

**Training**

- Understand how to proficiently design and operate CORIO master.
- Available as hands on training, remote training or video clips.
- CTS accredited training academy is available at our UK & US offices.

**Commissioning**

- A full commissioning service by tvONE engineers for the ultimate peace of mind.

**Repair**

- Reliable system diagnosis by our knowledgeable engineers.
- Fast repair of any mainframes or modules.
- 5-year warranty period.

**Design**

- Validation of your requirements to select the most suited CORIO master configuration.
- Offline design of your CORIO master using CORIO grapher software.
- Get the very best from your installation.

**Support Services**

- 5-year warranty period.
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**CORIOmaster Family**

CORIOmaster can easily be populated with input and output modules to match your source and display requirements:
- 4RU, 16 Module capacity
- High quality low latency performance guaranteed
- Bandwidth can support 4 videowalls
- Dual redundant PSU option

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**Specifications**

**Video Processing Power**
- Parallel Processing Architecture: Yes
- CORIO3 Video Processing: Yes
- Real Time Video Quality: Unknown
- Yes
- Up/Downtown Conversion: Yes
- Number of Video walls: C3-503 x 2, C3-510 x 4, C3-540 x 4
- Display Size Compensation: Yes, different sizes in video walls
- Output Rotation: Yes for any outputs and windows
- Projector Edge Blending: No
- HDCP Key Handling: Yes

**Computer Input**
- Digital DVI via Universal DVI*: C3-503 up to 4, C3-510 up to 4, C3-540 up to 5
- Analog via DVI: C3-503 up to 4, C3-510 up to 4, C3-540 up to 5
- RGB Level Range: 0.7 Vp-p
- Scan Rate Detection: Automatic
- Analog Signals: PC to 1920x1200, HD to 1080p60
- DVI Signals: PC to 1920x1200, HD to 1080p60
- Max Horizontal Scan Rate: 156kHz

**Computer Outputs**
- DVI signals via DVI*: C3-503 up to 10, C3-510 up to 10, C3-540 up to 20
- Analog via DVI: C3-503 up to 4, C3-510 up to 4, C3-540 up to 4
- Analog Format: RGBHV, RGB, RGB, YPbPr
- YPbPr via DVI: C3-503 up to 4, C3-510 up to 10, C3-540 up to 28
- S/P DVI: C3-503 up to 4, C3-510 up to 10, C3-540 up to 28
- YC (S-Video) via DVI: C3-503 up to 4, C3-510 up to 10, C3-540 up to 28
- Digital DVI via Universal DVI*: C3-503 up to 4, C3-510 up to 10, C3-540 up to 28
- SD-SDI/HD-SDI/3G-SDI via BNC: C3-503 up to 4, C3-510 up to 10, C3-540 up to 28
- YUV /YPbPr via DVI: C3-503 up to 4, C3-510 up to 10, C3-540 up to 28
- Video Combi Filter: Adaptive
- Video Adjustments: Contrast, Brightness, RGB Gamma
- Conversion Technology: Proprietary – CORIO3
- Firmware Memory: Upgradeable via download.

**Video Inputs**
- Television Standards: NTSC, PAL
- Composite Video via DVI: C3-503 up to 4, C3-510 up to 4, C3-540 up to 5
- YUV /YPbPr via DVI: C3-503 up to 4, C3-510 up to 4, C3-540 up to 5
- SD-SDI/HD-SDI/3G-SDI via BNC: C3-503 up to 4, C3-510 up to 4, C3-540 up to 5
- SD-SDI/HD-SDI/3G-SDI via BNC: C3-503 up to 4, C3-510 up to 4, C3-540 up to 5
- 4K/SDI via HDMI & HDBaseT: C3-503 up to 2, C3-510 up to 4, C3-540 up to 14
- 4K/SD-SDI: C3-503 up to 16, C3-510 up to 32, C3-540 up to 96
- YUV /YPbPr via DVI-I: C3-503 up to 4, C3-510 up to 10, C3-540 up to 28
- YUV /YPbPr via DVI-I: C3-503 up to 4, C3-510 up to 10, C3-540 up to 28
- Media Handling: Supported devices: Flash file systems FAT, FAT32, ext3, ext2, NTFS
- Video Codecs: H.264 (CBP, Main, High), H.265/HEVC (Main)
- Video Formats: mp4, mov, mkv, mk3, ts, mts, .m2t
- Playback Bit Rates: Single stream to 100Mbs (per module), Dual Streams to 40Mbs (per module)

**File Playback Resolutions Supported**
- Up to 3480x2160@30fps: C3-503 up to 2, C3-540 up to 4
- Up to 1080p60@60fps: C3-503 up to 2, C3-540 up to 4
- Up to 7680 x 4320: Still Images

**Media Handling**
- External USB 3.0 Interface: C3-503 up to 2, C3-540 up to 4
- Supported devices: Flash file systems FAT, FAT32, ext3, ext2, NTFS
- Internal: High speed storage up 128GB per module

**Video Outputs**
- HDBaseT via RJ45: C3-503 TBD, C3-510 TBD, C3-540 TBD
- 4K Video Output Resolutions supported (via HDMI)
- Up to 7680 x 4320: Rendered to 4K
- Still Image Support: JPEG, PNG, BMP

**Control Methods**
- P-322: Via D9 Female Connector
- IP Interface: RJ45 Connector

**Warranty**
- Limited Warranty: 5 Years Parts and Labor

**Regulatory Compliance**
- Main unit: FCC, CE, RoHS, UL
- Mechanical: C3-540
  - Size (H x W x D): 178 x 482 x 334mm
  - Weight (Net): Approx. 33 lbs (with redundant PSU option)
- Mechanical: C3-503
  - Size (H x W x D): 178 x 482 x 334mm
  - Weight (Net): 17 lbs (with redundant PSU option)
- Mechanical: C3-510
  - Size (H x W x D): 178 x 482 x 334mm
  - Weight (Net): 33 lbs (with redundant PSU option)

**Environmental**
- Operating Temperature: 0° to +40°C (32°F to 104°F)
- Operating Humidity: 10% to 90%, Non-condensing
- Storage Temperature: -40° to +70°C (14°F to +158°F)
- Storage Humidity: 10% to 90%, Non-condensing
- MTBF: Approximately 50,000 hours

**Power Requirement**
- Internal Power Supply: 110v to 240v auto-detecting
- Power Consumption: C3-503: 60 watts maximum (fully populated chassis); C3-510: 125 watts maximum (fully populated chassis); C3-540: 300 watts maximum (fully populated chassis)

**Power Consumption**
- 300 watts maximum (fully populated chassis)
- SDI Input Module only supports 720p frame rates 50, 59.94 and 60Hz
- HDBaseT input capacity is not yet determined

**Future Release Specifications are subject to change without notice.**

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**CORIOmaster micro**
- Even smaller form factor with the same power!
- Super compact size
- 3 Module capacity

**CORIOmaster mini**
- Smaller form factor, same amazing capabilities!
- 1RU, 6 Module capacity
- Fixed dual DVI-U inputs