

CX-750-4 4-Window DVI-I Processor is an economical alternative to the C2-6104 Multi-Window Processor. It is based on 3x 1T-C2-750 Scalers and is based on TV One's exclusive CORIO®2 technology using high quality graphic scalers capable of working at full DVI video rates. The scalers can accommodate DVI-D resolutions up to 1920x1200@60Hz and 1080p, along with analog DVI-A (or HD15 via optional adaptor) resolutions up to 2048x2048 at virtually any refresh rate. Virtually all computer signal formats are supported

Six Still Image Stores are built into the unit which can recall one of ten images each to be used in place of the DVI-I inputs to add custom logos or backgrounds. If 4 video windows are in use, then 2x SIS images are still available. Settings are stored in non-volatile memory and retained even when power is switched off. Ten user defined presets (two controlled from the front panel) are available to customize settings for various applications.

An On-Screen Display is available to assist in setup. Functions can be controlled via the front panel Push Buttons, Infrared or RS-232. Windows Control Panel software is provided 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. The CX-750-4 system consists of 3x 1T-C2-750 Scalers and 1x P2-105 Power Supply housed in 2x RM-230 Rack-mount units and includes all necessary interface cables.

Advanced Features include Genlock, Chromakey, Lumakey and Mixing. The Key Mode allows computer graphics to be keyed over each other (one input over another). 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.



Key Features of the CX-750-4

- 4-Window Processor System
- 4x DVI-I Inputs
- 2x Internal Still Image Stores
- DVI-D I/O support to 1920x1200, 1080p/60
- DVI-A I/O support to 2048x2048, 1080p/60
- Analog supports RGBHV, RGBS, RGsB & YPbPr
- Control via RS-232, IR or Front Panel
- CORIOtool Suite compatible
- Variable Image Zoom to 10X and Shrink to 10%
- Per-pixel or percentage scaling control
- Autotest - Automatic analog picture sizing
- Chromakey, Lumakey, Genlock and Mix



This symbol on a product indicates that it is powered by CORIO®2 technology, the most flexible video processing engine now available.

Unlike most manufacturers, who use third party chipsets to provide video conversion, TV One has developed its own proprietary technology known as CORIO®2. This frees TV One products from the constraints imposed by third parties and results in an unsurpassed degree of flexibility. Products based on third party chipsets have a feature set frozen at the introduction of the product. Since the CORIO®2 video processing engine is entirely firmware based, it can be upgraded at any time by downloading the latest firmware version from the support website and flash upgrading the unit in the field. This enables new features to be added to units many years after the initial purchase. This "obsolescence insurance" means that a CORIO®2 based product can always be upgraded to the latest version of that model.

Comparison between the CX-750-4 and CX-6104 Multi-Window Processors

Feature	CX-750-4	C2-6104
Background Input	No (requires a 4th 1T-C2-750 Scaler unit)	Yes
Any input to any window routing	No (fixed according to wiring)	Yes
Full 4-window layer control	No (last 1T-C2-750 always on top of other windows)	Yes
De-interlacing & Noise Reduction for YPbPr	No	Yes
Still Image Store available at same time as 4 windows	Yes (2 nd and 3 rd units have a spare scaler each, so can be used for SIS)	No
Source labeling	No	Yes
Optional modules (Tally, etc.)	No	Yes
Rack Space Required	2RU	1RU
Ethernet Control	No	Yes
Menu System	OSD, but difficult to control, due to overlapping OSD's windows (Recommend using CORIOtool Suite)	LCD
10 presets available from front panel	No	Yes
Single button press to recall setup	No – each unit has individual presets	Yes

Specifications

Inputs

Signal Type 4x 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

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

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

Zoom Range Variable to 10X Zoom

Shrink Range Variable to 10%

Image Mirroring Horizontal and/or Vertical

Horizontal Filtering Full Digital

Conversion Technology Proprietary – CORIO®2

Frame Rate Conversion Frame add/drop

General Continued

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 & OSD

RS-232 Interface via D9 Female Connector

Infrared Remote via IRC-5 Remote Unit

Warranty

Limited Warranty 2 Years Parts and Labor

Regulatory Compliance

Main Units FCC, CE, RoHS

Power Supplies UL, CUL, CE, PSE, GS, RoHS

Mechanical

Size (H-W-D) 88x482x200mm (3.5"x19"x7.9")

Weight (Net) TBA

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

P2-105 Power Adapter 100-240VAC, 50-60Hz

Items Included

3x 1T-C2-750

2x RM-230

2x Interconnects

1x P2-105

1x Operations Manual

Product Item Number

CX-750-4

4-Window Processor System

Optional Accessories

ZDH-2038 DVI Male to 5-BNC Female

ZDH-2040 DVI Male to VGA Female

Panel Drawings

