



1T-C2-760 DVI Scaler PLUS is based on TV One's exclusive CORIO®2 technology and has a single Enhanced-Bandwidth high quality graphic scaler capable of working at full DVI video rates. The scaler can be used to convert digital DVI-D or analog DVI-A signals to another format, with full picture-in-picture flexibility.

DVI-D resolutions up to 1080p, 1920x1200@60Hz and 2880x900@60Hz are supported along with analog DVI-A (or HD15 via optional adaptor) resolutions up to 2048x2048 at virtually any refresh rate. A wide variety of computer signal formats are available to support PC, Mac and Workstation formats.

Enhanced-bandwidth processing ensure that both SD (525i/625i) and HD (1080i) YPbPr inputs are deinterlaced using pixel-based motion compensation at full resolution, and also features motion adaptive noise reduction. 3:2 pull-down is also included for SD/HD movie sources. Temporal interpolation is present to greatly improve frame-rate conversion.

The unit can also be used as a Seamless Switcher device, enabling the user to toggle between the two DVI inputs with cuts or other transitions. A Still Image Store is built into the unit which can store ten graphic images to be used by the scaler to add custom logos or masks.

Edge-blending is fully supported, complete with variable blend widths, gamma correction, and projector black-level adjustments. Two units can thus be used to create a large wide-screen display using two matched projectors.

All settings are stored in non-volatile memory and are retained even when power is switched off. Ten user defined presets (two controlled from the front panel) are also 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. The unit is housed in a desktop case and an optional rack mount kit holds one or two units.

Variable Zoom to 10X and Variable Shrink to as little as 10% gives full control over the scaled window. Multiple units can be cascaded to add additional windows. A border may also be placed around the scaled window, of variable color, size, offset and transparency.

Advanced Features include Genlock, Chromakey, Lumakey and Mixing. The Key Mode allows computer graphics to be keyed over each other (one scaled input over or behind a non-scaled input). The images may be faded in and out. Due to the 4:4:4 sampling format, precise keying at the pixel level can be achieved. The PIP mode allows either input to be inset into a window over the other input.



Key Features of the 1T-C2-760

- Single Enhanced-Bandwidth scaler
- 2x DVI-I Inputs, 1x DVI-I Output
- 1x Internal Still Image Store for 10 images
- DVI-D I/O support to 2880x900, 1920x1200,1080p/60
- DVI-A I/O support to 2048x2048, 1080p/60
- Analog supports RGBHV, RGBS, RGsB & YPbPr
- 525i/625i/1080i de-interlacing using motion compensation and adaptive noise reduction
- 3:2 pull-down for 525i/1080i sources
- Temporal interpolation frame-rate conversion
- Variable window border color & size
- Edge-blending
- Cut/Fade/Wipe/Push source transitions
- Control via RS-232, IR or Front Panel
- Windows Control Panel
- Variable Image Zoom to 10X and Shrink to 10%
- Per-pixel or percentage scaling control
- Single PIP of variable size
- Autoset Automatic analog picture sizing
- Chromakey and Lumakey
- Genlock and Mix
- Optional IR Remote Control Unit
- Optional Single/Dual Rackmount Kit



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 form 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.



Video Scalers

Model 1T-C2-760





Inputs

Signal Type 2x DVI-I via DVI-I Connector

Digital DVI-D Format: Max HD Resolution

1920x1200@60Hz Max PC Resolution 2880x900@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, $10K\Omega$, Pos or Neg

1080p@60Hz

Termination 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 1920x1200@60Hz Max PC Resolution 2880x900@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

Variable to 10X Zoom Zoom Range Shrink Range Variable to 10%

Horizontal and/or Vertical Image Mirroring

Horizontal Filtering Full Digital

Conversion Technology Proprietary - CORIO®2 Frame Rate Conversion Temporal interpolation Color Resolution 24-bit (16.8 Million Colors) Sampling Rate 165MHz maximum

24-bit, 4:4:4 format **Digital Sampling** Flash, Upgradeable via RS-232 Firmware Memory

Analog Video Adjust R-G-B Levels Contrast, Phase Control Methods

via Front Panel Buttons & OSD Local 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) 30x200x90mm(1.18"x7.87"x3.54")

Weight (Net) 0.52 kg (1.14 lbs)

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

External Power Supply 12VDC@1A **Accessories Included**

1x Operations Manual 1T-C2-760 1x Power Adapter US, UK or Euro

Product Item Numbers

1T-C2-760

DVI Scaler PLUS Optional Accessories

IRC-5 Infrared Remote Control RM-230 Single/Dual Rackmount Kit ZDH-2038 DVI Male to 5-BNC Female ZDH-2040 DVI Male to VGA Female

Panel Drawings

