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 de-interlaced 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. The CORIOtools Suite integrates fully with the unit. Windows Control Panel 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
- 10 user defined presets
- Variable window border color & size
- Edge-blending
- Cut/Fade/Wipe/Push source transitions
- Control via RS-232, IR or Front Panel
- Windows Control Panel
- CORIOtools Suite compatible
- 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
- Support for all current HDTV resolutions
- Automatic resolution detection
- 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.

Specifications

Inputs

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

Digital DVI-D Format:

Max HD Resolution	1080p@60Hz
Max PC Resolution	1920x1200@60Hz 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, 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 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
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	Temporal interpolation
Color Resolution	24-bit (16.8 Million Colors)
Sampling Rate	165MHz maximum
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	5 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, Euro or AU

Product Item Numbers

1T-C2-760	DVI Scaler PLUS

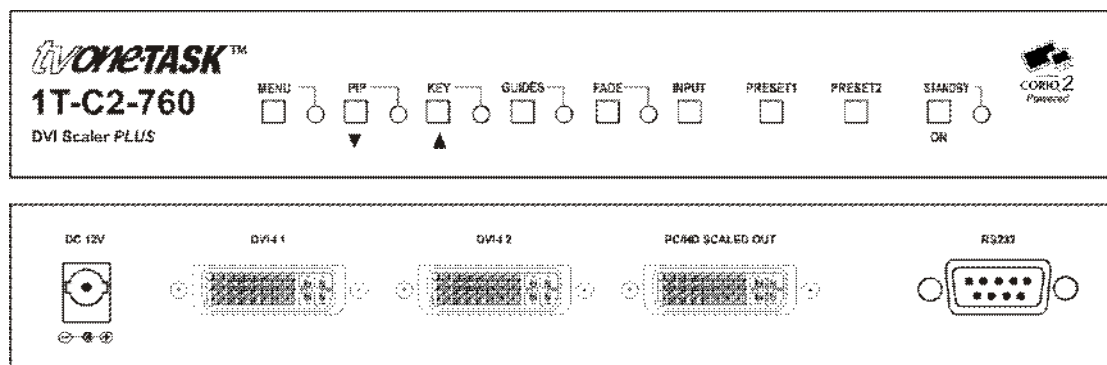### Optional Accessories

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