

**1T-C2-100 Down Converter** is based on TV One's exclusive CORIO®2 technology and provides high quality scan conversion from Computer or HDTV signals to standard video formats in a compact package. It handles any computer resolution up to 2048x2048 at any vertical refresh rate and all HDTV resolutions up to 1080p. A wide variety of computer signal formats are available to support PC, Mac and Workstation formats. Video outputs are switchable between NTSC and PAL and are simultaneously provided in Composite and YC. A PC loop-thru is also provided.

Our exclusive AutoSet feature takes the hassle out of setup by automatically sizing and positioning the computer image to fit exactly on the video screen. All settings are stored in non-volatile memory and are retained even when power is switched off. All the functions can be controlled via the front panel Push Buttons, an Infrared Remote Control Unit or an RS-232 connection. A Windows Control Panel is provided and most third party control systems interface directly with the entire C2 range of products. An On-Screen Display is available to assist in setup.

Variable Zoom to 10X allows you to enlarge any part of the computer screen to fill the entire video screen and position controls allow you to move around to any area desired. Variable Shrink to as little as 10% allows fitting the image onto most displays. The advanced Digital Flicker Elimination circuitry and high sampling rate insures crisp, clear images, while full bandwidth chroma sampling insures faithfully reproduced, high resolution colors. The 1T-C2-100 is housed in a compact desktop case and a single/dual rackmount kit is available as an option.

**1T-C2-150 Down Converter PLUS** has all the functions and features of the 1T-C2-100 and adds a wide variety of additional capabilities, such as Genlock, Chromakey and Lumakey. The **Key Mode** allows computer graphics to be keyed over an external Composite or YC signal. 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. The **Mix Mode** permits glitch-free mixing between the computer image and external video. The **PIP Mode** allows the computer input to be inset in a window over either of the video inputs.

The Genlock feature insures precise synchronization of the incoming signals by providing a wide Subcarrier lock range with Subcarrier phase adjustment.



**Key Features of the 1T-C2-100**

- Automatic Incoming Resolution Detection
- Computer Input via HD-15 with Loop-thru
- Computer Resolutions to 2048x2048
- HDTV Resolutions to 1080p
- AutoSet® - Automatic picture sizing
- Multiple Worldwide Television Standards
- Two CV and Two YC (S-Video) Outputs
- RS-232 Interface
- Windows Control Panel included
- Variable Image Zoom to 10X and Shrink to 10%
- Optional IR Remote Control
- Optional Single/Dual Rackmount Kit

**Additional Features of the 1T-C2-150**

- Genlock with Subcarrier Phase Adjustment
- Chromakey and Lumakey
- Mix and PIP
- CV and YC (S-Video) Input



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.

**Specifications**

<p><b>Computer Input</b></p> <p>Signal Type - Analog RGBHV, RGBS, RGsB, YPbPr</p> <p>Sync TTL Level, 10KΩ, Pos or Neg</p> <p>Termination Auto-terminating into 75Ω</p> <p>Connectors 1x HD-15 Female with Loop-thru</p> <p>R-G-B Level Range 0.5-2.0 Vp-p</p> <p>Scan Rate Detection Automatic</p> <p>PC Resolutions Any up to 2048x2048</p> <p>HDTV Resolutions Any up to 1080p</p> <p>Vertical Refresh Rate Any to 250Hz</p> <p>Max Horiz Scan Rate 150KHz</p> <p>Computer Compatibility PC, Macintosh, Workstations</p>		<p><b>Operational Modes</b></p> <p>Key Chromakey or Lumakey</p> <p>Mix Mix PC to/from Video</p> <p>PIP Variable Window Size &amp; Position</p> <p><b>Genlock Adjustments</b></p> <p>Subcarrier Lock Range +/- 200Hz for NTSC Operation (+/- 250Hz for PAL Operation)</p> <p>Subcarrier Phase +/- 180°</p>
<p><b>Video Inputs</b></p> <p>Composite Video 1x via BNC</p> <p>YC (S-Video) 1x via 4-Pin Mini-DIN Connector</p>		<p><b>Control Methods</b></p> <p>Local via Front Panel Buttons &amp; OSD</p> <p>RS-232 Interface via D9 Female Connector</p> <p>Infrared Remote via IRC-5 Remote Unit</p>
<p><b>Video Outputs</b></p> <p>Television Standards NTSC, PAL, PAL-M, PAL-N, SECAM</p> <p>Impedance 75Ω</p> <p>Composite Video 2x via BNC (1x on 1T-C2-150)</p> <p>YC (S-Video) 2x via 4-PIN (1x on 1T-C2-150)</p> <p>Computer Loop-thru 1x via HD-15 Female Connector</p>		<p><b>Warranty</b></p> <p>Limited Warranty 2 Years Parts and Labor</p>
<p><b>General</b></p> <p>Size and Position Automatic via AutoSet or Manual</p> <p>Image Size User-Definable Presets</p> <p>Image Freeze One Video Frame</p> <p>Settings Memory Non-Volatile</p> <p>Zoom Range Variable to 10X Zoom</p> <p>Shrink Range Variable to 10%</p> <p>Image Mirroring Horizontal and/or Vertical</p> <p>Horizontal Filtering Full Digital</p> <p>Conversion Technology Proprietary – CORIO®2</p> <p>Color Resolution 24-bit (16.8 Million Colors)</p> <p>Sampling Rate 108MHz</p> <p>Digital Sampling 24-bit, 4:4:4 format</p> <p>Firmware Memory Flash, Upgradeable via RS-232</p> <p>Video Encoder 8-bit Digital</p> <p>Video Adjustments R-G-B Levels</p>		<p><b>Regulatory Compliance</b></p> <p>Main Units FCC, CE, RoHS</p> <p>Power Supplies UL, CUL, CE, PSE, GS, RoHS</p> <p><b>Mechanical</b></p> <p>Size (H-W-D) 30x200x90mm(1.18"x7.87"x3.54")</p> <p>Weight (Net) 0.52 kg (1.14 lbs)</p> <p><b>Environmental</b></p> <p>Operating Temperature 0° to +50° C (+32° to +122° F)</p> <p>Operating Humidity 10% to 85%, Non-condensing</p> <p>Storage Temperature -10° to +70° C (+14° to +158° F)</p> <p>Storage Humidity 10% to 85%, Non-condensing</p> <p><b>Power Requirement</b></p> <p>External Power Supply 12VDC@1A</p>
<p><b>Accessories Included</b></p> <p>1x Operations Manual</p> <p>1x Power Adapter</p>		<p><b>Product Item Numbers</b></p> <p>1T-C2-100 Down Converter</p> <p>1T-C2-150 Down Converter PLUS</p>
<p><b>Optional Accessories</b></p> <p>IRC-5 Infrared Remote Control</p> <p>RM-230 Single/Dual Rackmount Kit</p>		

**Panel Drawings**

