



1T-C2-100 Down Converter is based on TV One's exclusive CORIO2[™] 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. In order to deal with PC, Mac and most Computer Workstation signals, a wide variety of computer signal formats can be accommodated. Video outputs are switchable between NTSC and PAL and are simultaneously provided in Composite and S-Video. 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 Control Remote Unit or via 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 S-Video 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
- 2x Composite and 2x S-Video Outputs
- RS-232 Interface and Windows Control Panel
- IR Remote Control
- Variable Image Zoom to 10X and Shrink to 10%
- Optional Single/Dual Rackmount Kit

Additional Features of the 1T-C2-150

- Genlock with Subcarrier Phase Adjustment
- Chromakey and Lumakey
- Mix and PIP
- Composite and S-Video Input



This symbol on a product indicates that it is powered by CORIO2[™] 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 CORIO2[™]. 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 CORIO2[™] 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 CORIO2[™] based product can always be upgraded to the latest version of that model.





Specifications

Computer Input		Operational Modes	(1T-C2-150)
Signal Type - Analog	RGBHV, RGBS, RGsB, YPbPr	Key	Chromakey or Lumakey
Sync	TTL Level, $10K\Omega$, Pos or Neg	Mix	Mix PC to/from Video
Termination	Auto-terminating into 75Ω	PIP	Variable Window Size & Position
Connectors	1x HD-15 Female with Loop-thru	Genlock Adjustments	(1T-C2-150)
		Subcarrier Lock Range	+/- 200Hz for NTSC Operation
R-G-B Level Range	0.5-2.0 Vp-p Automatic	Subcarrier Lock Range	(+/- 250Hz for PAL Operation)
Scan Rate Detection		Subcarrier Phase	+/- 180°
PC Resolutions	Any up to 2048x2048	Control Methods	+/- 180
HDTV Resolutions	Any up to 1080p	Local	via Front Panel Buttons & OSD
Vertical Refresh Rate	Any to 250Hz	RS-232 Interface	via D9 Female Connector
Max Horiz Scan Rate	150KHz	Infrared Remote	via IRC-4 Remote Unit
Computer Compatibility	PC, Macintosh, Workstations		Via IRC-4 Remote Unit
Video Inputs	(1T-C2-150 Only)	Warranty	2 Veers Darts and Labor
Composite Video	1x via BNC	Limited Warranty	2 Years Parts and Labor
S-Video (YC)	1x via 4-Pin Mini-DIN Connector	Regulatory Compliance	
Video Outputs		Main Units	FCC, CE, RoHS
Television Standards	NTSC, PAL, PAL-M, PAL-N, SECAM	Power Supplies	UL, CE, CSA, RoHS
Impedance	75Ω	Mechanical	1 0"x7 0"x2 F" (20x200x00mm)
Composite Video	2x via BNC (1x on 1T-C2-150)	Size (H-W-D)	1.2"x7.9"x3.5" (30x200x89mm)
S-Video (Y/C)	2x via 4-PIN (1x on 1T-C2-150)	Weight (Net)	1.3 lbs (580g)
Computer Loop-thru	1x via HD-15 Female Connector	Environmental	
General		Operating Temperature	+4° to +45° C (+40° to +113° F)
Size and Position	Automatic via AutoSet or Manual	Operating Humidity	10% to 85%, Non-condensing
Image Size	User-Definable Presets	Storage Temperature	0° to +60° C (+32° to +140° F)
Image Freeze	One Video Frame	Storage Humidity	10% to 85%, Non-condensing
Settings Memory	Non-Volatile	Power Requirement	
Zoom Range	Variable to 10X Zoom	External Power Supply	12VDC@1A
Shrink Range	Variable to 10%	Accessories Included	
Image Mirroring	Horizontal and/or Vertical	1x C-Video Cable	6' (2m) BNC to BNC
Horizontal Filtering	Full Digital	1x VGA Cable	6' (2m) HD15 Male to Male
Conversion Technology	Proprietary – CORIO2™	1x Serial Cable	6' (2m) D9 Male to Male
Color Resolution	24-bit (16.8 Million Colors)	1x IR Remote	IRC-4
Sampling Rate	108MHz	1x Operations Manual	1T-C2-100 Series
Digital Sampling	24-bit, 4:4:4 format	1x In-Plug Power Supply	US, UK or Euro
Firmware Memory	Flash, Upgradeable via RS-232	Product Item Numbers	
Video Encoder	8-bit Digital	1T-C2-100	Down Converter
Video Adjustments	R-G-B Levels	1T-C2-150	Down Converter PLUS
		Optional Accessories	
		RM-230	Single/Dual Rackmount Kit

Panel Drawings

