

C2-160 PC/ISA Card 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 virtually 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.

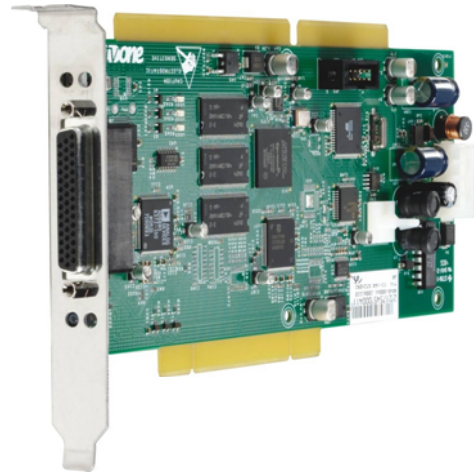
Our exclusive AutoSet feature takes the hassle out of setup by automatically sizing and positioning the computer image to fit exactly on the video screen. All settings can be stored in non-volatile memory and are retained even when power is switched off. All the functions can be controlled via an optional Infrared Remote Control Unit or an RS-232 connection. The CORIOtools Suite integrates fully with the unit. 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 ensures crisp, clear images, while full bandwidth chroma sampling ensures faithfully reproduced, high resolution colors. The C2-160 plugs into a vacant slot inside a PC and receives its power from a standard Hard Drive connector within the PC.

The C2-160 also features 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 ensures precise synchronization of the incoming signals by providing a wide Subcarrier lock range with Subcarrier phase adjustment.

The unit is provided with a single break-out cable incorporating all of the required PC and video inputs and outputs, along with RS232.



Key Features of the C2-160

- Automatic Incoming Resolution Detection
- 1x Computer Input with Loop-thru
- Computer Resolutions to 2048x2048
- HDTV Resolutions to 1080p
- 1xCV and 1xYC (S-Video) Inputs
- Multiple Worldwide Television Standards
- 1xCV and 1xYC Outputs
- Control by RS-232 or IR Interface
- Windows Control Panel included
- CORIOtools Suite compatible
- Optional IR Remote Control
- Variable Image Zoom to 10X and Shrink to 10%
- Genlock with Subcarrier Phase Adjustment
- Mix, PIP, Chromakey and Lumakey
- AutoSet - Automatic picture sizing



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

Computer Input	(Note 1)
VGA Video	1 x HD-15 Male Connector
Signal Type - Analog	RGBHV, RGBS, RGB, YPbPr
Sync	TTL Level, 10K Ω , Pos or Neg
Termination	Auto-terminating into 75 Ω
R-G-B Level Range	0.5-2.0 Vp-p
Scan Rate Detection	Automatic
PC Resolutions	Any up to 2048x2048
HDTV Resolutions	Any up to 1080p
Max Horiz Scan Rate	150KHz
Video Inputs	(Note 1)
Composite Video	1 x BNC Connector
YC (S-Video)	1 x 4-Pin Mini-DIN Connector
Standards Supported	NTSC, PAL
Impedance	75 Ω
CV/YC Decoder	8-bit Digital
Comb Filter Decoding	Adaptive
CV, YC Adjustments	Contrast, Bright, Saturation, Hue
Sub-carrier Lock Range	+/-200Hz NTSC, +/-250Hz PAL
Sub-Carrier Phase	+/- 180 degrees
Video Outputs	(Note 1)
Composite Video	1 x BNC Connector
YC (S-Video)	1 x 4-PIN Mini-DIN Connector
Computer Loop-thru	1 x HD-15 Female Connector
Television Standards	NTSC, PAL
Impedance	75 Ω
CV/YC Encoder	8/10 bit Digital
Operational Modes	
Key	ChromaKey or LumaKey
Mix	Mix PC To/From Video
PIP	Variable Window Size & Pos.
General	
Pix Size and Position	Automatic 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%

General (Continued)

Image Mirroring	Horizontal and/or Vertical
Horizontal Filtering	Full Digital
Conversion Technology	Proprietary – CORIO®2
Color Resolution	24-bit (16.8 Million Colors)
Sampling Rate	108MHz
Digital Sampling	24-bit, 4:4:4 format
Firmware Memory	Flash, Upgradeable via RS-232
Video Adjustments	R-G-B Levels

Control Methods

Local	Via Included software
Infra-Red	Via Optional Remote Control
RS-232 Interface	Via D9 Female Conn. (Note 1)

Warranty

Limited Warranty	5 Years Parts and Labor
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Regulatory Compliance

PCI/ISA Card	FCC, CE, CSA, RoHS
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Mechanical

Size (W-D)	100mmx204mm (4"x8")
Weight (Net)	0.14 kg (0.31 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

12 VDC @ 800ma	Via PC Hard Drive Connector
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Accessories Included

1x Breakout Cable	HD-44 to Various Connectors
1x Operations Manual	Provided on CD
1x Control Software	Microsoft Windows Based

Product Item Numbers

C2-160	PCI/ISA Down Converter
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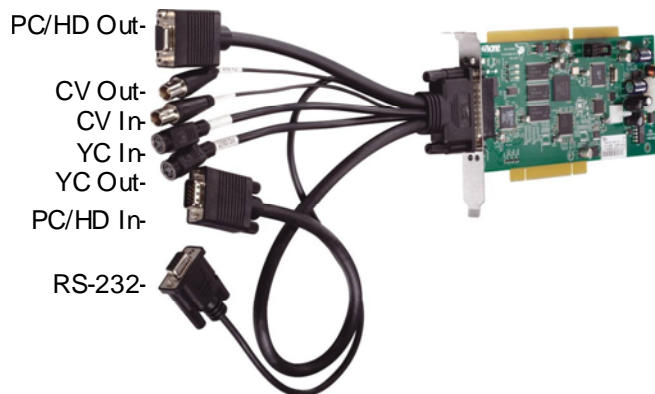
Optional Accessories

IRC5	Infrared Remote Control
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Note

(1) All Video and PC connections are via a breakout cable.

C2-160 with Breakout Cable Attached



Sample Windows Control Panel Menus



Keyer
Menu



Sources
Menu