

PC Card Down Converter

Model C2-160



C2-160 PCI/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.

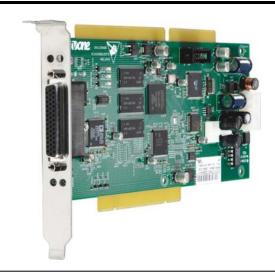
Our exclusive AutoSet feature takes the hassle out of setup by automatically sizing and positioning the computer image to fit exactly on the video screen. All settings can be stored in non-volatile memory and are retained even when power is switched off. All the functions can be controlled via an optional Infrared Remote Control Unit or an RS-232 connection. 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 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 insures 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
- 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 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.



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Specifications

Computer Input

VGA Video Signal Type - Analog

Sync

Termination

R-G-B Level Range Scan Rate Detection

PC Resolutions HDTV Resolutions Max Horiz Scan Rate

Video Inputs

Composite Video YC (S-Video)

Standards Supported

Impedance CV/YC Decoder Comb Filter Decoding

CV, YC Adjustments Sub-carrier Lock Range

Sub-Carrier Phase

Video Outputs

Composite Video YC (S-Video)

Computer Loop-thru **Television Standards** Impedance

CV/YC Encoder

Operational Modes Key

Mix PIP

General

Pix Size and Position Image Size

Image Freeze **Settings Memory**

Zoom Range Shrink Range (Note 1)

1x HD-15 Male Connector RGBHV, RGBS, RGsB, YPbPr TTL Level, $10K\Omega$, Pos or Neg

Auto-terminating into 75Ω

0.5-2.0 Vp-p Automatic

Any up to 2048x2048

Any up to 1080p

150KHz (Note 1)

1x BNC Connector

1x 4-Pin Mini-DIN Connector

NTSC, PAL 75Ω

8-bit Digital Adaptive

Contrast, Bright, Saturation, Hue +/-200Hz NTSC, +/-250Hz PAL

+/- 180 degrees

(Note 1)

1x BNC Connector

1x 4-PIN Mini-DIN Connector 1x HD-15 Female Connector

NTSC, PAL 75Ω

8/10 bit Digital

Chromakey or Lumakey Mix PC To/From Video Variable Window Size & Pos.

Automatic AutoSet or Manual

User-Definable Presets One Video Frame Non-Volatile

Variable to 10X Zoom Variable to 10%

General (Continued)

Horizontal Filtering

Conversion Technology

Sampling Rate

Firmware Memory

Local Infra-Red

RS-232 Interface

Mechanical

Operating Humidity

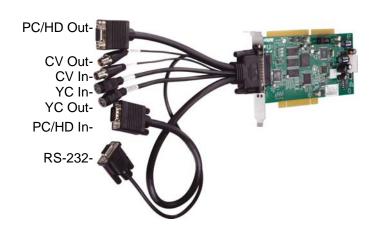
C2-160

IRC5

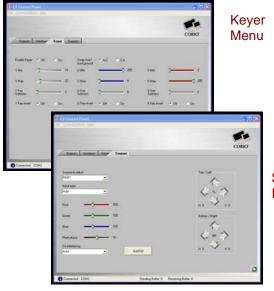
Note (1) All Video and PC connections are via a breakout cable.

Image Mirroring Horizontal and/or Vertical Full Digital Proprietary - CORIO®2 Color Resolution 24-bit (16.8 Million Colors) 108MHz Digital Sampling 24-bit, 4:4:4 format Flash, Upgradeable via RS-232 Video Adjustments R-G-B Levels **Control Methods** Via Included software Via Optional Remote Control Via D9 Female Conn. (Note 1) Warrantv **Limited Warranty** 2 Years Parts and Labor **Regulatory Compliance** PCI/ISA Card FCC, CE, CSA, RoHS 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) 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 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** PCI/ISA Down Converter **Optional Accessories** Infrared Remote Control

C2-160 with Breakout Cable Attached



Sample Windows Control Panel Menus



Sources Menu