Down Converters

Models C2-1100, C2-1150



C2-1100 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. 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, YC and YUV Component. Alternatively, the output can be YPbPr Component (Progressive Scan). 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 via 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 C2-1100 is housed in a desktop case and a rackmount kit is available as an option.

C2-1150 Down Converter PLUS has all the functions and features of the C2-1100 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 or vice versa. 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 either of the computer inputs 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.

Input Expansion is available for both models by choosing the appropriate S2 Series Input Switcher, which links to the main unit via an Options Interconnect Cable. The routing of these additional inputs is controlled directly from the C2-1000 Series converter's control system.



Key Features of the C2-1100

- Automatic Incoming Resolution Detection
- Two Computer Inputs via HD-15 and 5-BNC
- Computer Resolutions to 2048x2048
- HDTV Resolutions to 1080p
- AutoSet Automatic picture sizing
- Multiple Worldwide Television Standards
- CV, YC (S-Video), YUV, YPbPr Outputs
- RS-232 Interface & Windows Control Panel
- CORIOtools Suite compatible
- Variable Image Zoom to 10X and Shrink to 10%
- Optional IR Remote Control
- Optional Single/Dual Rackmount Kit
- Optional Input Expansion for Additional Inputs

Additional Features of the C2-1150

- Genlock with Subcarrier Phase Adjustment
- PIP, Chromakey and Lumakey
- 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 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 Inputs (2x)

Signal Type - Analog Sync

Termination

Connectors

R-G-B Level Range Scan Rate Detection PC Resolutions **HDTV** Resolutions

Vertical Refresh Rate Max Horiz Scan Rate

Computer Compatibility

Video Inputs Composite Video

YC (S-Video) **Video Outputs**

Television Standards

Impedance Composite Video

YC (S-Video) YUV, YPbPr

Computer Loop-thru

General

Size and Position Image Size

Image Freeze Settings Memory

Zoom Range Shrink Range Image Mirroring

Horizontal Filtering

Conversion Technology Color Resolution

Sampling Rate

Digital Sampling

Firmware Memory

Video Encoder Video Adjustments RGBHV, RGBS, RGsB, YPbPr TTL Level, $10K\Omega$, Pos or Neg Auto-terminating into 75Ω 1x HD-15 Female with Loop-thru

1x via 5-BNC 0.5-2.0 Vp-p Automatic

Any up to 2048x2048 Any up to 1080p Any to 250Hz

150KHz

PC, Macintosh, Workstations

(C2-1150 Only) 1x via BNC

1x via 4-Pin Mini-DIN Connector

NTSC, PAL, PAL-M, PAL-N, SECAM

750 1x via BNC

1x via 4-PIN Mini-DIN

1x via 3-BNC

1x via HD-15 Female Connector

Automatic via AutoSet or Manual User-Definable Presets

One Video Frame Non-Volatile

Variable to 10X Zoom Variable to 10%

Horizontal and/or Vertical

Full Digital

Proprietary - CORIO®2 24-bit (16.8 Million Colors)

108MHz

24-bit. 4:4:4 format

Flash, Upgradeable via RS-232

8-bit Digital R-G-B Levels **Operational Modes**

Key Chromakey or Lumakey Mix Mix PC to/from Video

PIP Variable Window Size & Position

Genlock Adjustments

Subcarrier Lock Range +/- 200Hz for NTSC Operation

+/- 180°

Subcarrier Phase **Control Methods**

Local

RS-232 Interface Infrared Remote

Input Expansion Control

Warranty Limited Warranty

Regulatory Compliance

Main Units

Power Supplies Mechanical

Size (H-W-D)

Weight (Net)

Environmental

Operating Temperature Operating Humidity Storage Temperature Storage Humidity

Power Requirement

External Power Supply

Accessories Included 1x Operations Manual

1x Power Adapter

Product Item Numbers

C2-1100 C2-1150

Optional Accessories

IRC-5 RM-220 S2 Series (C2-1150)

(C2-1150)

(+/- 250Hz for PAL Operation)

via Front Panel Buttons & OSD via D9 Female Connector

via IRC-5 Remote Unit via D-15 Options Connector

5 Years Parts and Labor

FCC, CE, RoHS

UL, CUL, CE, PSE, GS, RoHS

41.5x218x150mm(1.63"x8.6"x5.9")

1.22kg (2.68 lbs)

0° to +50° C (+32° to +122° F) 10% to 85%, Non-condensing -10° to $+70^{\circ}$ C (+14° to +158° F)

10% to 85%, Non-condensing

12VDC@1A

C2-1000 Series US, UK, Euro or AU

Down Converter Down Converter PLUS

Infrared Remote Control Single/Dual Rackmount Kit Input Expansion Switchers

Panel Drawings







