

Universal Video Switcher/Scalers

Model C2-1350



C2-1350 Universal Video Scaler is based on TV One's exclusive CORIO®2 technology and provides high quality up, down and cross conversion between standard video, computer and HDTV signals. NTSC and PAL standards are supported. Inputs can be Composite Video, YC, YUV Component, YPbPr (Progressive Scan) Component or RGB. 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. Signal parameters of the incoming video may be adjusted. All settings are stored in non-volatile memory and are retained even when power is switched off. The high resolution RGB/YPbPr outputs are selectable as any computer resolution up to 2048x2048 at any vertical refresh rate or any HDTV resolution up to 1080p. A wide variety of computer signal formats are available to support PC, Mac and Workstation formats. In the standard resolution mode, simultaneous outputs are available for Composite, YC and YUV Component.

All the functions can be controlled via the front panel Push Buttons, an Infrared Control Remote Unit or via an RS-232 connection. CORIOtools Suite, Windows Control Panel 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 the image to fit 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. Motion compensation and a 3:2 Pulldown feature for NTSC greatly improve image quality.

Stereo Audio switching is provided by an integral 4x1 audio routing switcher. The four impedance-independent unbalanced inputs follow the video input selection. A rear panel terminal block provides access.

PIP, Chromakey, Lumakey, Mixing and Genlock are among the advanced standard features. 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 or vice versa. The PIP window may be placed anywhere on the screen. The Genlock feature ensures precise synchronization of the incoming signals by providing a wide Subcarrier lock range with Subcarrier phase adjustment. The C2-1350 is housed in a desktop case with an optional rackmount kit.

Edge Blending is a standard feature of the C2-1350. Because of the ability to 'feather' any or all of the edges,



Key Features of the C2-1350

- Inputs: RGB/YPbPr via HD-15, YUV/YPbPr via 3-BNC, CV via BNC, YC (S-Video) via 4-Pin
- All Input Signals are Scalable
- Automatic Incoming Resolution Detection
- AutoSet Automatic picture sizing
- Computer Resolutions to 2048x2048
- HDTV Resolutions to 1080p
- Multiple Worldwide Television Standards
- 3:2 Pulldown for NTSC Film Mode
- Video signal parameter adjustments
- Outputs include: two RGB/YUV/YPbPr via HD15 and 5-BNC, one CV via BNC and one YC
- Integral 4x1 Stereo Audio Routing Switcher
- RS-232 Interface & Windows Control Panel
- CORIOtools Suite compatible
- Variable Image Zoom to 10X and Shrink to 10%
- Genlock With Subcarrier Phase Adjustment
- PIP, Chromakey and Lumakey, Edge Blending
- Optional IR Remote Control
- Optional Single/Dual Rackmount Kit
- Optional Input Expansion with S2 Switchers

multiple images can be aligned vertically, horizontally or both to create unusual displays. Using multiple units, a large number of images may be blended. Edge Blending is not limited to high resolution RGB computer images, but can be applied to any input. Gamma correction is employed to compensate for many of the problems faced when blending between projectors. Special preparation of the video in advance is not necessary, since all processing is done within the unit.

Input Expansion to add additional RGB, YPbPr, YUV, Composite or YC inputs is easy by using any of the optional S2 Series Input Expansion Switchers. The S2 unit links to any C2-1000 series unit via an Options Interconnect Cable and becomes an integral part of scaler from a control and operational standpoint. The routing of these additional inputs is controlled directly from the control system of the C2. Multiple different S2 models may be simultaneously connected to a single C2, providing virtually unlimited input flexibility



This symbol on a product indicates that it is powered by CORIO®2 technology, the most flexible video processing engine now available.



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Specifications

Video Inputs

Television Standards Composite Video

YC (S-Video) YUV /YPbPr

Computer Input

RGB/YPbPr Format - Analog

Sync Termination

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

HDTV Resolutions Max Horiz Scan Rate

Computer Compatibility **Video Outputs**

Television Standards

Impedance Composite Video

YC (S-Video)

YUV, YPbPr

Computer Outputs (2x) Format - Analog

Connectors R-G-B Level

PC Resolutions **HDTV** Resolutions Vertical Refresh Rate

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 Decoder

De-Interlacing (NTSC-PAL)

Comb Filter Decoding Adaptive

Film Mode (NTSC)

Video Adjustments

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

1x via BNC

1x via 4-Pin Mini-DIN Connector

1x via 3-BNC

1x via HD15

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

PC, Macintosh, Workstations

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

1x via BNC

1x via 4-PIN Mini-DIN

1x via 3-BNC (shared w RGB Out)

RGBHV, RGBS, RGsB, YPbPr 1x HD-15 Female and 1x5-BNC

0.7 Vp-p

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

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 9-bit Digital

Pixel-level Motion Adaptive

3:2 Pulldown

Contrast, Brightness, Saturation,

Hue (NTSC), R-G-B Levels

Audio Input/Output

Innuts Output

Operational Modes

Key Mix

PIP

Genlock Adjustments Subcarrier Lock Range

Subcarrier Phase **Control Methods**

Local

RS-232 Interface Infrared Remote Input Expansion Control

Warrantv

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 C2-1350

Optional Accessories

IRC-5 RM-220

S2 Series

4x Unbalanced via Terminals Unbalanced via Terminals

Chromakey or Lumakey

PC to/from Video

Variable Window Size & Position

+/- 200Hz for NTSC Operation (+/- 250Hz for PAL Operation)

+/- 180° Adjustment

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")

1.26kg (2.77 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

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Infrared Remote Control Single/Dual Rackmount Kit Input Expansion Switchers

Panel Drawings



