

Key Features C2-1350

- Up ▲, Down ▼, Cross X Conversion
- Inputs: RGB/YPbPr via HD-15, YUV/YPbPr via 3-BNC, CV via BNC, YC via 4-Pin
- Outputs include: two RGB/YUV/YPbPr via HD15 & 5-BNC, one CV via BNC & one YC
- All Input Signals are Scalable
- Automatic Incoming Resolution Detection
- AutoSet Automatic picture sizing
- Analog RGBHV to 2048x2048
- All HDTV resolutions to 1080p/60
- Multiple Worldwide Television Standards
- 3:2 Pulldown for NTSC Film Mode
- · Video signal parameter adjustments
- Integral 4x1 Stereo Audio Routing Switcher
- RS-232 Interface
- Windows Control Panel
- Variable Image 10X Zoom & Shrink to 10%
- Genlock With Subcarrier Phase Adjustment
- PIP, Chroma & Lumakey, Edge Blending
- Optional IR Remote Control
- Optional Single/Dual Rackmount Kit
- Optional Input Expansion with S2 Switchers

C2-1350

Universal Switcher/Scaler (▲▼×)



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.

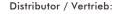
PIP, Chromakey, Lumakey, Mixing and Genlock are among the advanced standard features. The Key Mode allows computer graphics to be keyed over an external Composite or YC signal or visa versa. The keyed image may be faded in and out. Due to the 4:4:4 sampling format, precise keying at the pixel level can 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 visa versa. The PIP window may be placed anywhere on the screen. The Genlock feature insures 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, 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.

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 the image to fit 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. 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.

Video Switcher/Scalers





C2-1350 Specifications

Video Inputs

Television Standards NTSC, PAL, PAL-M, PAL-N, SECAM

Composite Video 1x via BNC

YC (S-Video) 1x via 4-Pin Mini-DIN Connector YUV /YPbPr 1x via 3-BNC

Computer Input

RGB/YPbPr 1x via HD15

 $\begin{array}{lll} \mbox{Format - Analog} & \mbox{RGBHV, RGBS, RGsB, YPbPr} \\ \mbox{Sync} & \mbox{TTL Level, } 10 \mbox{K}\Omega, \mbox{Pos or Neg} \\ \mbox{Termination} & \mbox{Auto-terminating into } 75 \mbox{}\Omega \\ \end{array}$

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/60

Max Horiz Scan Rate 150KHz

Computer Compatibility PC, Macintosh, Workstations

Video Outputs

Television Standards NTSC, PAL, PAL-M, PAL-N, SECAM

 $\begin{array}{ll} \text{Impedance} & 75\Omega \\ \text{Composite Video} & 1\text{x via BNC} \end{array}$

YC (S-Video) 1x via 4-PIN Mini-DIN YUV, YPbPr 1x via 3-BNC (shared w RGB Out)

Computer Outputs (2x)

Format - Analog RGBHV, RGBS, RGsB, YPbPr Connectors 1x HD-15 Female and 1x 5-BNC

R-G-B Level 0.7 Vp-p

PC Resolutions
HDTV Resolutions
Vertical Refresh Rate
Any up to 2048x2048
Any up to 1080p
Any to 250Hz

General

Size and Position

Image Size

User-Definable Presets

Image Freeze

Settings Memory

Zoom Range

Shrink Range

Image Mirroring

Automatic via AutoSet or Manual

User-Definable Presets

One Video Frame

Non-Volatile

Variable to 10X Zoom

Shrink Range

Variable to 10%

Image Mirroring

Horizontal and/or Vertical

Horizontal Filtering Full Digital

Conversion Technology Proprietary – CORIO®2
Color Resolution Proprietary – CORIO®2
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 Encoder 8-bit Digital
Video Decoder 9-bit Digital

De-Interlacing (NTSC-PAL) Pixel-level Motion Adaptive

Comb Filter Decoding Adaptive Film Mode (NTSC) 3:2 Pulldown

Video Adjustments Contrast, Brightness, Saturation, Hue (NTSC),

R-G-B Levels

Audio Input/Output

Inputs 4x Unbalanced via Terminals
Output Unbalanced via Terminals

Operational Modes

Key Chromakey or Lumakey
Mix PC to/from Video

PIP Variable Window Size & Position

Genlock Adjustments

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

Subcarrier Phase +/- 180° Adjustment

Control Methods

Local via Front Panel Buttons & OSD RS-232 Interface via D9 Female Connector Infrared Remote via IRC-5 Remote Unit Input Expansion Control via D-15 Options Connector

Warranty

Limited Warranty 5 Years Parts and Labor

Regulatory Compliance

Main Units FCC, CE, RoHS

Power Supplies UL, CUL, CE, PSE, GS, RoHS

Mechanical

Size (H-W-D) 41.5x218x150mm(1.63"x8.6"x5.9")

Weight (Net) 1.26kg (2.77 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

External Power Supply 12VDC@1A

Accessories Included

1x Operations Manual C2-1000 Series 1x Power Adapter US, UK or Euro

Product Item Numbers

C2-1350 Universal Video Switcher/Scaler

Optional Accessories

IRC-5 Infrared Remote Control
RM-220 Single/Dual Rackmount Kit
S2 Series Input Expansion Switchers
1x Control Software Downloadable from website









