

Video Switcher/Scalers

Models C2-2200, C2-2205, C2-2250, C2-2255



C2-2200 Video Switcher/Scaler is based on TV One's exclusive CORIO®2 technology and provides high quality scaling to Analog or DVI Computer or HDTV signals. NTSC and PAL video standards are supported. Video Inputs are two Composite, two YC and one YUV Component or YPbPr. A computer bypass is also provided. RGB/YPbPr Scaling permits the computer input signals to be scaled with the same flexibility as the video inputs. The output is selectable as 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. C2-2205 provides an SDI Input as well as all the other features of the C2-2200.

All the functions can be controlled via the front panel Push Buttons, an Infrared Remote Control Unit or via an RS-232 or IP connection. A Windows Control Panel is provided and most third party control systems interface directly with the entire C2 range of products. A front panel LCD makes setup easy.

Variable Zoom to 10X allows you to enlarge any part of the video image to fill the entire computer 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 high sampling rate insures crisp, clear images, while full bandwidth chroma sampling insures faithfully reproduced, high res colors.

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.

C2-2250 Video Scaler PLUS has all the functions and features of the C2-2200 and adds a wide variety of additional capabilities, including PIP, Chromakey, Lumakey and Mixing. 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 video inputs to be inset in a window over either of the computer inputs. C2-2255 provides an SDI Input as well as all the other features of the C2-2250.

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. Optional rackmount kits are available for all C2-2000 models.

Edge Blending is a standard feature of the C2-2250 and C2-2255. 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 can be blended.



Key Features of the C2-2200, C2-2205

- Automatic Incoming Resolution Detection
- Analog Computer Input via HD-15 Connector
- DVI-D Computer Input via DVI-I Connector
- Inputs: 2xCV, 2xYC (S-Video), 1xYUV/YPbPr Component
- 1x SDI Input (C2-2205)
- Scaling of the RGB or YPbPr input signal
- Analog PC to 2048x2048, HDTV to 1080p
- DVI PC to 1280x1024, HDTV to 1080p/30
- AutoSet Automatic picture sizing
- Multiple Worldwide Television Standards
- 2x Outputs: DVI-I and Analog RGBYPbPr
- Integral 4x1 Stereo Audio Routing Switcher
- RS-232 and IP Interface
- Windows Control Panel
- 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 C2-2250, C2-2255

- PIP, Chromakey and Lumakey, Edge Blending
- SDI Input (C2-2255)

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 projectors. Special preparation of the video in advance is not necessary, since all processing is done within the unit.

Input Expansion to add additional DVI, 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 C2-2000 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.



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Specifications

Video Inputs

Television Standards Composite Video YC (S-Video) YUV /YPbPr SDI (SMPTE 259M)

Computer Inputs

Signal Type
Format
Sync
Termination
R-G-B Level Range
Scan Rate Detection
PC Resolutions

Max Horiz Scan Rate Computer Compatibility Computer Outputs

HDTV Resolutions

Signal Type

Format
R-G-B Level
Analog Signals
DVI Signals
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

Digital Sampling
Firmware Memory
Video Decoder
De-Interlacing (NTSC)

De-Interlacing (NTSC-PAL) Comb Filter Decoding Film Mode (NTSC) $\mathsf{NTSC},\,\mathsf{PAL},\,\mathsf{PAL}\text{-}\mathsf{M},\,\mathsf{PAL}\text{-}\mathsf{N},\,\mathsf{SECAM}$

2x via BNC

2x via 4-Pin Mini-DIN

1x via 3-BNC

1x via BNC (C2-2205, C2-2255)

1x Analog via HD-15 Female 1x DVI-D via DVI-I Connector RGBHV, RGBS, RGsB, YPbPr TTL Level, $10K\Omega$, Pos or Neg Auto-terminating into 75Ω 0.5-2.0 Vp-p

0.5-2.0 Vp-p Automatic

Any up to 2048x2048 Any up to 1080p

150KHz

PC, Macintosh, Workstations

1x Analog via HD-15 Connector 1x DVI-I via DVI-I Connector RGBHV, RGBS, RGSB, YPbPr

0.7 Vp-p

PC to 2048x2048,HD to 1080p PC to 1280x1024,HD to 1080p/30

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) 24-bit, 4:4:4 format

Flash, Upgradeable via RS-232

9-bit Digital

Pixel-level Motion Adaptive

Adaptive 3:2 Pulldown

Video Adjustments

Audio Input/Output Inputs

Output

Operational Modes

Key Mix PIP

Control Methods

Local

RS-232 Interface IP Interface

Infrared Remote
Input Expansion Control

Warranty

Limited Warranty
Regulatory Compliance

Main Units
Power Supplies

Mechanical Size (H-W-D)

C2-2200 Weight (Net)

C2-2205 Weight (Net) C2-2250 Weight (Net) C2-2255 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

C2-2200 C2-2205 C2-2250 C2-2255

Optional Accessories

IRC-5 RM-220 S2 Series Contrast, Brightness, Saturation, Hue (NTSC), R-G-B Levels

4x Unbalanced via Terminals Unbalanced via Terminals (C2-2250, C2-2255) Chromakey or Lumakey PC to/from Video

via Front Panel Buttons & OSD

Variable Window Size & Position

via D9 Female Connector RJ45 Connector via IRC-4 Remote Unit via D-15 Options Connector

2 Years Parts and Labor

FCC, CE, RoHS

UL, CUL, CE, PSE, GS, RoHS

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

1.28kg (2.82 lbs) 1.32kg (2.90 lbs) 1.28kg (2.82 lbs) 1.30kg (2.86 lbs)

0° to +50° C (+32° to +122° F) 10% to 85%, Non-condensing -10° to +70° C (+14° to +158° F) 10% to 85%, Non-condensing

12VDC@1A

C2-2000 Series US, UK or Euro

Video Switcher/Scaler

Video Switcher/Scaler w/SDI In Video Switcher/Scaler PLUS Video Sw Scaler PLUS w/SDI In

Infrared Remote Control Single/Dual Rackmount Kit Input Expansion Switchers

Panel Drawings



