

C2-5100 Universal Video Scaler is a multi-function image conversion and scaling product coming very near the ideal of "Anything In – Anything Out". Not only is it a high performance Video Scaler, Up-Converter, Down-Converter and Multi-Format Seamless Switcher, but it goes far beyond that. It's also a Worldwide Standards Converter, Chromakeyer, Lumakeyer, Picture-in-Picture Device, HDTV Converter, Frame Synchronizer, Time Base Corrector, Aspect Ratio Converter and a Universal Image Genlock, just to name a few. The 9-Inputs and 4-Outputs will accommodate Composite Video, S-Video, YCbCr, YPbPr, all HDTV formats and any RGBHV resolution up to 2048x2048 - not just some predefined ones, but ANY resolution, even custom ones. Plus, the C2-5100 also has 2-Outputs for Preview (RGBHV and Composite Video) to facilitate live event switching.

As a Picture-in-Picture Device, the C2-5100 Universal Video Scaler is unparalleled in its price range. Any video input can be squeezed and placed into a window of any size and positioned anywhere on the screen. The window can be placed over any other video input as the background. The image in the window can then be seamlessly switched to another video input. The image can also be zoomed while it is in the window.

C2-5100's output signal format flexibility assures that the Native Resolution of virtually any Digital Display can be matched. Because of the integral resolution calculator, even new resolutions can be instantly added to the menu. Adjustments are provided for Brightness, Contrast Color Saturation and Hue (where applicable) and each video input has its own non-volatile memory to retain these settings, even when the power to the unit has been turned off. Integral Test Signals are user defined. A Logo memory is provided, so the unit can easily be used as a Logo Inserter. The C2-5100 employs advanced motion compensation to smooth out fast moving images and its automatic 3:2 Pull-down detection efficiently de-interlaces video from 24 fps film. The unit can be controlled from the front panel, via RS-232, IR or by the optional IP interface. The Windows Control Panel provides complete control of the unit and adds Macros to facilitate long, complex sequence of commands. Multiple units may be controlled from one Control Panel.

C2-5200 Universal Video Scaler provides all the features and functions of the C2-5100 and adds an SDI input and output. This brings the unit's I/O total to 10 Inputs and 5 Outputs. Additionally, a second SDI input is provided exclusively as a genlock source. The SDI I/O is fully integrated into the architecture of the unit, so that any of the other signal formats may be converted to and from SDI and the SDI signal can be used as either the background or insert in the Picture-in-Picture windowing mode. Of course, it is also possible to seamlessly switch between any of the analog inputs and the SDI input.



C2-5000 Series Front



C2-5100 Rear



C2-5200 Rear



Windows Control Panel



CC-300 CORIOconsole

Multiple Products in One

- Seamless Switcher
- Video Scaler
- Aspect Ratio Converter
- PC ◀▶ HDTV
- PC ◀▶ PC
- SDTV ◀▶ HDTV
- HDTV ◀▶ HDTV
- Analog ◀▶ SDI
- Frame Sync / TBC
- Picture-in Picture
- Down Converter
- Standards Converter
- Multi-Format Genlock
- Logo Inserter
- Video Transcoder
- Chromakeyer
- Lumakeyer
- And more...

External Control

The C2-5100 and C2-5200 can be controlled from the front panel buttons and integrated LCD or remotely by RS-232 or by IP (C2-5110 and C2-5210).

The Windows Control Panel affords complete control of the unit and adds Macros to facilitate long, complex command sequences.

In addition, the optional CC-300 CORIOconsole provides a hardware control solution similar to a traditional Video Switcher.

A2-2000 Stereo Audio Switcher is an option offered to add Audio Follow Video or Audio Breakaway capability to the units. Both Balanced and Unbalanced inputs and outputs are provided.

Sample Capabilities

Zooms of up to 1,000% are possible with the C2-5000 Series Universal Video Processor



The C2-5000 Series Universal Video Processor allows you to insert an active Picture-in-Picture image over an active background without regard to signal type, with or without a border.



Key Features of the C2-5100, C2-5200

- Multiple Conversion & Scaling products in one
- Up to 10 Multi-format Inputs and 5 Outputs
- 2 Preview Outputs – RGBHV and Composite
- I/O: CV, SV, YUV, YPbPr, RGBHV, RGsB, RGSB
- RGBHV to 2048x2048 & All HDTV Resolutions
- Genlock any Video Input to any other
- SDI I/O and Genlock (C2-5200 Only)
- AutoSet Sizing - Exclusive CORIO® feature
- Seamless Switching with Cuts or Fades
- Unrestricted P-I-P – Any Input over any other
- RS-232 Interface for external control
- CORIO2® Technology Conversion Engine
- Auto Detect Worldwide Television Standards
- Zoom up to 1000% with 100% Pan coverage
- Image Shrink to 10% with 100% Pan coverage
- Video Image Adjustment with Multiple Memory
- Front Panel Knob, Buttons & LCD for control
- Optional IR Remote or IP Interface
- Universal Internal Power Supply



Multi-format Chroma-keys are fully supported in the C2-5000 series Universal Video Processor

Specifications

10 Video Inputs

Composite Video	3x via BNC Connector
S-Video (Y/C)	3x via 4-PIN Mini-DIN Connector
SDI (C2-5200 Only)	1x via BNC Connector
RGBHV, YPbPr, YCbCr	3x (1x via 5-BNC, 2x via HD-15F) (Note 1)

Genlock Input

Reference Signal	Any of the Video Inputs
SDI (C2-5200 Only)	1x via BNC

5 Video Outputs

Composite Video	1x via BNC Connector
S-Video (Y/C)	1x via 4-PIN Mini-DIN Connector
SDI (C2-5200 Only)	1x via BNC Connector
RGBHV, YPbPr, YCbCr	2x (1x via 5-BNC, 2x via HD-15F)

2 Preview Outputs

Composite Video	1x via BNC Connector
RGBHV, YPbPr, YCbCr	1x via HD-15 Female Connector

Input/Output Range

Computer Resolutions	Up to 2048x2048
Max Vert Refresh Rate	250Hz
Max Horiz Frequency	150KHz
HDTV Resolutions	All Known Resolutions & Formats
Interlace Support	Progressive and Interlaced
Television Standards	PAL-B, G, I, D, H, PAL-M, PAL-N NTSC 3.58, NTSC 4.43, SECAM, SMPTE 259M
SDI (C2-5200 Only)	

Input RGB Sync

Type	Auto-detect RGBHV, RGSB, RGsB
Level / Impedance	TTL, 10K Ω
Polarity	Positive or Negative
Maximum Level	5Vp-p

Output RGB Sync

Type	RGBHV, RGSB
Level / Impedance	5Vp-p, 220 Ω
Polarity	Positive or Negative

Audio Switching (Optional A2-2000)

Stereo Inputs	10x Balanced and Unbalanced
Program Output	1x Balanced and Unbalanced
Preview Output	1x Balanced and Unbalanced
Connectors per I/O	2x RCA for Unbalanced 1x Terminal Block for Bal & Unbal

Control Methods

Local Front Panel	10x Programmable Buttons +LED, Rotary Selector, LCD Readout
RS-232 Interface	DB-9 Male Connector
IP Interface	Optional – RJ45 Connector
Infrared Control Option	IRC-5 Remote Control Unit
Audio Switcher Control	Via D-15 Options Connector from the Main Unit

Mechanical

Desktop Case (HWD)	1.75"x17"x7.9" (44x420x200mm)
With Rack Ears (HWD)	1.75"x19"x7.9" (44x482x200mm)
C2-5100 Weight (Net)	8.0 lbs (3.6 kg)
C2-5200 Weight (Net)	8.4 lbs (3.8 kg)
A2-2000 Weight (Net)	6.0 lbs (2.7 kg)

Environmental

Operating Temperature	+5° to +45° C (+41° to +113° 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

General

Image Size & Position	AutoSet or Manual
Image Zoom Range	Continuous to 1000%
Image Shrink Range	Continuous to 10%
Image Mirroring	Horizontal and/or Vertical
Image Freeze	Full Frame
Video Memory	4x4MBytes Picture Memory Buffers (16MBytes total)
Resolution Memory	Approximately 1,000 Definable
Firmware Memory	Flash, Upgradeable via RS-232
Flicker Filter	4-Level Vertical
Picture-in-Picture	Any 2 Video Inputs
Number PIP Windows	Multiple Units may be Cascaded
Video I/O Impedance	75 Ω
Video Decoder	9-bit Digital
Comb Filter Decoding	Adaptive
De-Interlacing (PAL-NTSC)	Pixel-Level Motion Adaptive
Film Mode (NTSC)	3:2 Pull Down Detection
Video Encoder	10-bit Digital
Digital Sampling	24-bit, 8-bits per R, G and B
Colors	16.7 Million
Video Scaling Engine	Proprietary CORIO2®
Internal Format	4:2:2 YCbCr
Internal Test Patterns	User Defined
LCD Panel	24x2 Character
Logo Inserter	Flash Programmable
Proc Amp Adjustments	Brightness, Contrast, Saturation, & Hue for CV & SV Inputs, plus Video Level for RGB Inputs
Proc Amp Memory	Settings for each Video Input

Power Requirement

Internal Power Supply	100-240VAC, 47-63Hz, 50W
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Warranty

Limited Warranty	2 Years Parts and Labor
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Regulatory Approvals

Video Scaler Unit	FCC, CE
Power Supplies	UL, CE, CSA

Accessories Included

1x C-Video Input Cable	6' (2m) BNC to BNC
1x S-Video Input Cable	6' (2m) 4-Pin S-V to 4-Pin S-V
1x VGA Output Cable	6' (2m) HD-15 Male to Male
1x RGBHV Out Cable	6' (2m) 5 BNC to 5 BNC
1x RS-232 Cable	6' (2m) D9F to DB9F
1x AC Power Cord	6' (2m) US, UK or Euro or Type
1x Operations Manual	C2-5000 Series
1x Rackmount Kit	2 Ears and 4 Screws
1xControl Software	Downloadable from website

Optional Accessories

A2-2000	Audio Switcher (Note 2)
IRC-4	IR Remote Control Unit
Add 10 to Model No.	Network Interface (Factory Installed)
CC-300 CORIOconsole	Hardware Control Panel

Product Item Number

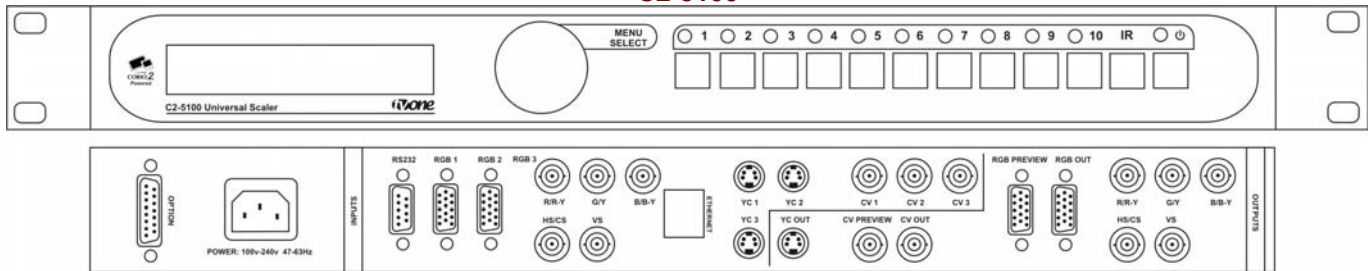
C2-5100	Universal Scaler
C2-5110	Universal Scaler with IP Interface
C2-5200	Universal Scaler with SDI I/O
C2-5210	Universal Scaler with SDI & IP

Notes

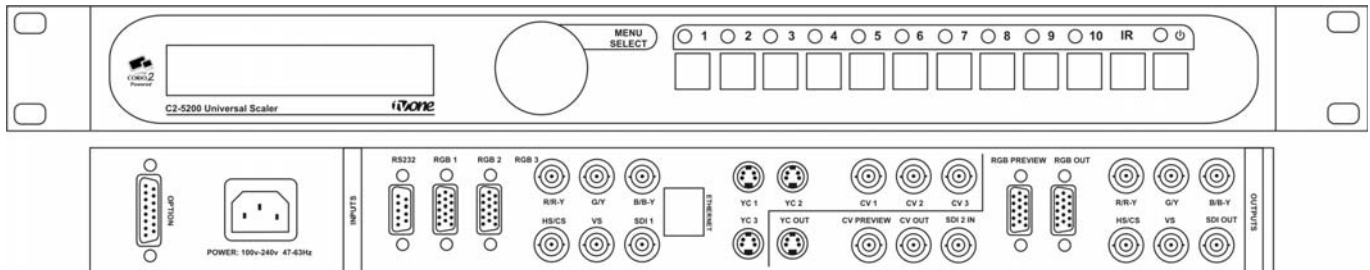
- (1) RGBHV Inputs/Outputs may also be RGSB or RGsB.
- (2) A2-2000 is controlled from the C2-5100 or C2-5200 and provides Audio Follow Video or Audio Breakaway.

Panel Drawings

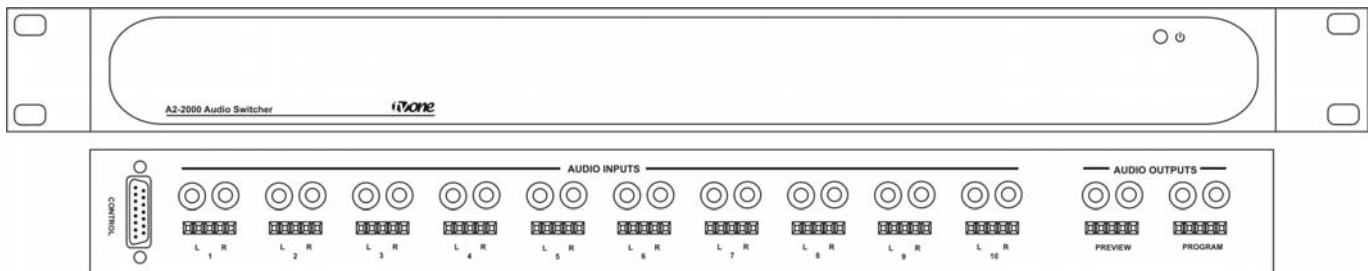
C2-5100



C2-5200



A2-2000



CC-300

