

C2-770 Universal Video Scaler is the new benchmark for video image conversion products and comes nearer to the ideal of "Anything In – Anything Out" than any other conversion product on the market. 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, Chromkeyer, 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 C2-770 also has 2-Outputs for Preview (RGBHV and Composite Video) to facilitate live event switching.

As a Picture-in-Picture Device, the C2-770 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. Multiple C2-770 units may be cascaded to provide layer upon layer and window upon window of images from virtually any source, from Composite Video through HDTV.

C2-770 is ideally suited for use with LCD Projectors, CRT Monitors, Projection TV Systems, Plasma or HDTV Displays to improve picture quality. With its output signal format flexibility, it is assured that the Native Resolution of virtually any Digital Display can be matched. Adjustments are provided for Color Saturation, Hue, Brightness and Contrast 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 C2-770 employs advanced motion compensation to smooth out fast moving images and its automatic 3:2 Pull-down efficiently de-interlaces video from 24 fps film. The unit can be controlled from the front panel, via RS-232, by an optional Infrared Control or by the Internet or a LAN with the optional Ethernet Control.

C2-775 Universal Video Scaler provides all the features and functions of the C2-770 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



C2-775

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.

A2-700 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.

Multiple Products in One

- Up Converter
- Seamless Switcher
- SDTV-HDTV Scaler
- HDTV-HDTV Scaler
- Frame Synchronizer
- Standards Converter
- Analog-SDI Converter
- Aspect Ratio Converter
- Multi-Format Genlock
- Lumakeyer
- Down Converter
- Picture-in Picture
- PC-HDTV Scaler
- PC-PC Scaler
- Time Base Corrector
- Windowing Device
- Video Transcoder
- Logo Inserter
- Chromakeyer
- And more...

Key Features of the C2-770, C2-775

- 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 to any Video Input to any other
- SDI I/O and Genlock (C2-775 Only)
- AutoSet Sizing - Exclusive CORIO® feature
- P-I-P to Window any Video Input into 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 Network Interface
- Universal Internal Power Supply



Universal Video Scalers

Models C2-770, C2-775

Specifications

10 Video Inputs

Composite Video	3x via BNC Connector
S-Video (Y/C)	3x via 4-PIN Mini-DIN Connector
SDI (C2-775 Only)	1x via BNC Connector
RGBHV, YPbPr, YCbCr	3x (1x via 5-BNC, 2x via HD-15F)

Genlock Input

Reference Signal	Any of the Video Inputs
SDI (C2-775 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 (C2-775 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	Any from 640x480 to 2048x2048
Max Vert Refresh Rate	250Hz
Max Horiz Frequency	150KHz
HDTV Resolutions	480p, 576p, 720p, 1080i
Interlace Support	Progressive and Interlaced
Television Standards	NTSC 3.58, NTSC 4.43, SECAM, PAL-B, G, I, D, H, PAL-M, PAL-N SMPTE 259M
SDI (C2-775 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 A2-700)

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
Infrared Control Option	IRC-5 Remote Control Unit
Audio Switcher Control	Via D-15 Options Connector from the Main Unit

Mechanical

Desktop Case (HWD)	1.75x17x7.9" (44x420x200mm)
With Rack Ears (HWD)	1.75x19x7.9" (44x482x200mm)
Weight (Net)	5.0 lbs (2.25 kg)

Environmental

Operating Temperature	+32° to +122° F (0° to +50° C)
Operating Humidity	10% to 85%, Non-condensing
Storage Temperature	-4° to +158° F (-20° to +70° C)
Operating 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	Pixel-level Motion Adaptive
Film Mode	3:2 Pull Down
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 Inuts
Proc Amp Memory	Settings for each Video Input
Power Requirement	
Internal Power Supply	100-240VAC, 47-63Hz, 50W
Warranty	
Limited Warranty	2 Years Parts and Labor
Regulatory Approvals	
Video Scaler Unit	FCC, CE
Power Supplies	UL, CE, CSA
Accessories Included	
1x C-Video Input Cable	6' BNC to BNC
1x S-Video Input Cable	6' 4-Pin S-V to 4-Pin S-V
1x VGA Output Cable	6' HD-15 Male to Male
1x RGBHV Out Cable	6' 5 BNC to 5 BNC
1x AC Power Cord	6' USA Type 3-Pin
1x Operations Manual	
1x Rackmount Kit	2 Ears and 4 Screws
1x Software Disk	CORIO2 [®] Windows Control Panel
Optional Accessories	
A2-700	Audio Switcher (Note 2)
IRC-5	IR Remote Control Unit
C2-IP	Network Interface (Factory Installed)
Product Item Number	
C2-770	Universal Video Processor
C2-775	C2-770 Features, plus SDI I/O
Notes	
(1) RGBHV Inputs/Outputs may also be RGSB or RGsB.	
(2) A2-700 is controlled from the C2-770 or C2-775.	

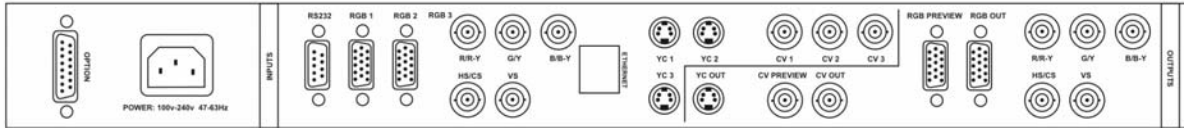
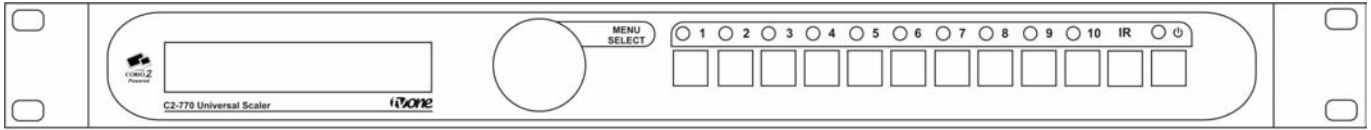


Universal Video Scalers

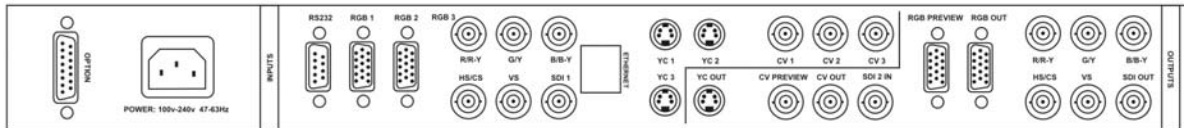
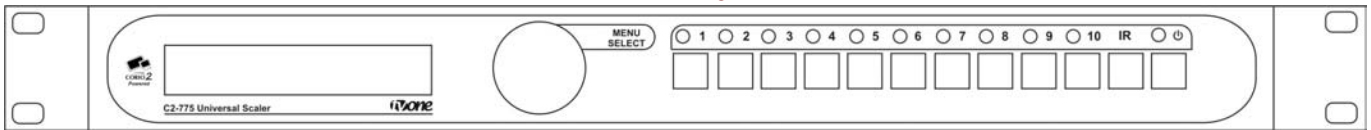
Models C2-770, C2-775

Panel Drawings

C2-770



C2-775



A2-700

