# C2-2855 / C2-2755 / C2-2655

Scaling with Speed and Agility





## A new generation of Scalers

tvONE's evolutionary development of our renowned CORIO®2 scaler technology continues to provide commercial integrators with unsurpassed image quality in nearly any installation situation. Now, to further improve upon the core technology, we are introducing a new generation of scalers that are extremely intuitive & user-friendly and provide greater flexibility.

These new designs have more input/output flexibility than any other previous tvONE scaler. They can be set up and managed using a new, innovative front panel or via computer-based control panel that allows setup in less than ½ the time of the previous generation. The interface provides two distinct sections for unrivaled ease of use; one for system setup and another for live, real-time operations. The front panel helps with setup time through color modulated soft-buttons, intuitive categorized menus, and simple recall of up to 12 presets. Control software is available on several Windows platforms & interfaces directly with the unit. IP and RS-232 serial interfaces are also provided for use with 3rd party control systems.

These scalers provide high quality bi-directional conversion between a variety of analog and digital video formats. Inputs and Outputs include SD/HD/3G-SDI, HDMI, DVI, Composite Video, YC, YUV, YPbPr or RGB. 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. Twelve user-defined presets are available to customize settings for various applications. The high resolution RGB/YPbPr output is selectable at virtually any PC or HDTV resolution. NTSC, PAL, PAL-M, and PAL-N standards are supported. SECAM is supported for input.

tvONE's Calibrate feature automatically sizes and positions computer images to fit exactly on the video display, and the 10X Variable Zoom can enlarge and position any part of an input to fill the entire video output display. Variable Shrink with as much as 90% size reduction allows almost any image to fit on the tiniest screen. Both high sampling rate and the advanced Digital Flicker Elimination circuitry on CV &

YC outputs ensure crisp, clear images, while full bandwidth chroma sampling ensures faithfully reproduced, high resolution colors. Motion compensation, diagonal interpolation and a 3:2 Pulldown feature for NTSC greatly improve the image quality. Temporal interpolation greatly improves frame-rate conversion by merging successive frames. Pixel Level Motion Adaptive Diagonal Interpolation ensures high quality deinterlacing of PAL & NTSC signals.

Advanced Features - Keying allows one input to be keyed over a second input. The keyed image may be faded in and out. Due to the 4:4:4 sampling format for RGB sources, precise keying at the pixel level can be achieved. Transitions permit Seamless Cut, Fade or Wipe transitions between input sources. The Picture-In-Picture (PIP) functionality allows an input to be inset in a window over a second input 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 adjust.

Basic Integral 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 and a 3.5mm jack-socket provides access. Embedded Audio Support allow s any audio input to be embedded on all outputs which support embedded audio data (HDMI/DVI-U/SDI).

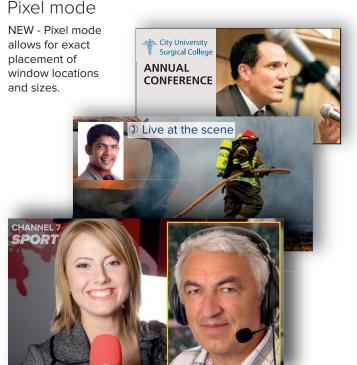
The units are housed in desktop cases and can be rack-mounted with an optional 19-inch rackmount kit that holds one or two units.

#### Remote control

The computer based remote control enables fast set-up of the unit, ie network connections, transitions, keying etc. Main menus can be accessed via a series of shortcut keys.



Using the 2 step preset setup configurations can be stored to enable quick screen changes at the touch of a button.



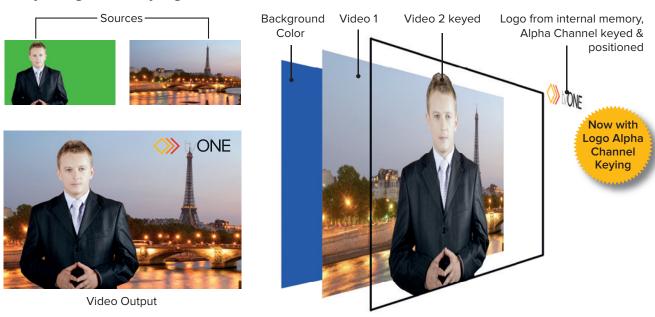
Picture-in-Picture capability - any size, any position

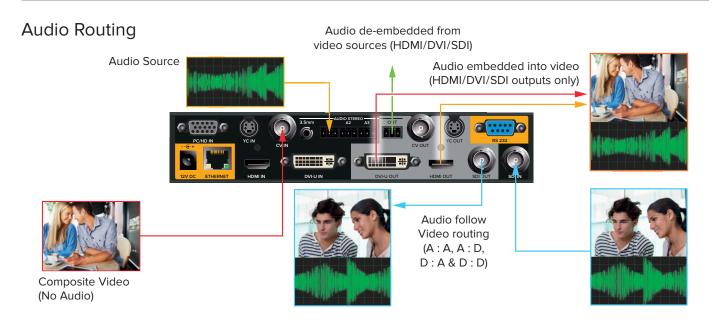
### Up/Down/Cross Conversion



Please note these are only examples of Up, Down & Cross Conversion. In usage only a single output resolution is possible at one time.

### Video Layering with Keying





#### Video I/O Interfaces

Connector	C2-2855	C2-2755	C2-2655
HDMI In	•	•	•
Universal DVI In	•	•	•
YC In	•	•	•
CV In	•	•	•
SDI In	•	•	
PC/HD In	•	•	•
HDMI Out	•	•	•
Universal DVI Out	•	DVI-I only	•
YC Out	•		•
CV Out	•		•
SDI Out	•		•

#### **Video Resolutions**

ALL models support ALL the resolutions below for input.

For output, different models support different resolutions as indicated by the model columns.

Resolution	C2-2855	C2-2755	C2-2655	Resolution	C2-2855	C2-2755	C2-2655	Resolution	C2-2855	C2-2755	C2-2655
NTSC 525i	•		•	1280x720 23.98Hz	•	•	•	1360x768 60Hz	•	•	
PAL 625i	•		•	1280x720 24Hz	•	•	•	1365x1024 75Hz	•	•	
640x480 60Hz	•	•	•	1280x720 25Hz	•	•	•	1400×900 60Hz	•	•	
640x480 67Hz	•		•	1280x720 29.97Hz	•	•	•	1400x1050 60Hz Rb#	•	•	
640x480 72Hz	•		•	1280×720 30Hz	•	•	•	1400x1050 60Hz	•	•	
640x480 75Hz	•		•	1280x720 50Hz	•	•	•	1400x1050 75Hz	•	•	
640x480 85Hz	•		•	1280×720 59.94Hz	•	•	•	1600x1200 60Hz	•	•	
640x480 117Hz	•			1280×720 60Hz	•	•	•	1680x1050 60Hz	•	•	
640x480 138Hz	•		•	1280×768 60Hz Rb#	•	•		1920x1080i 47.96Hz	•	•	•
720x480 59.94Hz	•			1280×768 60Hz	•	•		1920x1080i 48Hz	•		•
720x576 50Hz	•			1280×768 75Hz	•	•		1920x1080i 50Hz	•	•	•
800x600 56Hz				1280x768 85Hz	•	•		1920x1080i 59.94Hz	•		•
800x600 60Hz	•	•		1280×800 60Hz Rb#	•	•		1920x1080i 60Hz	•	•	•
800x600 72Hz				1280×800 60Hz	•	•		1920x1080 23.98Hz	•	•	•
800x600 75Hz	•	•		1280×800 75Hz	•	•		1920x1080 24Hz	•	•	•
800x600 85Hz	•			1280×800 85Hz	•	•		1920x1080 25Hz	•		•
800x600 95Hz	•	•		1280×960 60Hz	•	•		1920x1080 29.97Hz	•	•	•
800x600 112Hz				1280×960 72Hz	•	•		1920x1080 30Hz	•		•
1024×768 60Hz	•			1280x960 85Hz	•	•		1920x1080 50Hz	•	•	•
1024x768 70Hz				1280×1024 60Hz	•			1920x1080 59.94Hz			•
1024×768 75Hz				1280×1024 70Hz	•	•		1920x1080 60Hz	•	•	•
1024x768 85Hz				1280×1024 75Hz	•	•		1920x1200 50Hz Rb#	•		
1024×768 89Hz	•			1280×1024 85Hz	•	•		1920x1200 60Hz Rb#	•	•	

<sup>#</sup> Rb = reduced blanking

**NEW** - Resolution Editor as part of the CORIOcontrol software can be used to create new custom resolutions that can be used as input or output resolutions.





# C2-2855 Specifications

Video Input	
Television Standards	NTSC, PAL
Composite Video	1x via BNC & 1x via DVI-U*
YC (S-Video)	1x via 4-Pin Mini-DIN & 1x via DVI-U*
HDTV	1x via HDMI (DVI 1.0, HDCP 1.4) & 1x via DVI-U*
SD/HD/3G-SDI	1x via BNC
Computer Inputs	
Signal Type	1x Analog via PC/HD HD15, 1x DVI-U*
Format	RGBHV, RGBS, RGsB, YPbPr, YUV
Sync	TTL Level, 10K , Pos or Neg
Termination	75 Ω
R-G-B Level Range	0.5-2.0 Vp-p
Scan Rate Detection	Automatic
Analog Signals	PC to 1920x1080, HD to 1080p/60
DVI & HDMI signals	PC to 1920x1200, HD to 1080p/60
Max Horiz Scan Rate	150kHz
Computer Compatibility	PC, Mac, Workstations
Video Outputs	
Television Standards	NTSC, PAL
Impedance	75 Ω
Composite Video	1x via BNC
YC (S-Video)	1x via 4-PIN Mini-DIN
YUV, YPbPr	1x via DVI-U*
HDTV	1x via HDMI
	CEC pass-through for HDMI In to Out
SD/HD/3G-SDI	1x via BNC
Maximum Latency	1-2 Frames
Computer Outputs	
Signal Type	1x DVI-U* & 1 x HDMI
Format	RGBHV, RGBS, RGsB, YPbPr
R-G-B Level	0.7 Vp-p
Analog Signals	PC to 1920x1080, HD to 1080p/60
DVI & HDMI Signals	PC to 1920x1200, HD to 1080p/60
Image Processing features	
Size and Position	Automatic via AutoSet or Manual
Image Size	User-Definable Presets
Image Freeze	One Video Frame
Settings Memory	Non-Volatile
Zoom Range	Variable to 10X Zoom
Shrink Range	Variable to 10%
-	Horizontal and/or Vertical
Image Mirroring	
Horizontal Filtering	Full Digital
Conversion Technology	Proprietary - CORIO®2
Framerate Conversion	Temporal
Color Resolution	24-bit (16.8 Million Colors)
Sampling Rate	162MHz
D: :: 10 ::	04111 444 4000
Digital Sampling	
Firmware Memory	Flash upgradeable via RS-232 or IP
Firmware Memory Video Encoder & Decoder	Flash upgradeable via RS-232 or IP 8-bit Digital
Firmware Memory	Flash upgradeable via RS-232 or IP 8-bit Digital
Firmware Memory Video Encoder & Decoder	Flash upgradeable via RS-232 or IP 8-bit Digital
Firmware Memory Video Encoder & Decoder De-Interlacing (NTSC-PAL)	Flash upgradeable via RS-232 or IP 8-bit Digital Pixel-level Motion Adaptive, Diagonal Interpolation
Firmware Memory Video Encoder & Decoder De-Interlacing (NTSC-PAL) Film Mode (NTSC)	Flash upgradeable via RS-232 or IP 8-bit Digital Pixel-level Motion Adaptive, Diagonal Interpolation 3:2 Pulldown 1-2 frames
Firmware Memory Video Encoder & Decoder De-Interlacing (NTSC-PAL) Film Mode (NTSC) Maximum Latency	Flash upgradeable via RS-232 or IP 8-bit Digital Pixel-level Motion Adaptive, Diagonal Interpolation 3:2 Pulldown 1-2 frames
Firmware Memory Video Encoder & Decoder De-Interlacing (NTSC-PAL) Film Mode (NTSC) Maximum Latency Video Adjustments	Flash upgradeable via RS-232 or IP 8-bit Digital Pixel-level Motion Adaptive, Diagonal Interpolation 3:2 Pulldown 1-2 frames
Firmware Memory Video Encoder & Decoder De-Interlacing (NTSC-PAL) Film Mode (NTSC) Maximum Latency Video Adjustments Audio Input/Output	8-bit Digital Pixel-level Motion Adaptive, Diagonal Interpolation 3:2 Pulldown 1-2 frames CV/YC: Contrast, Brightness, Saturation, Hue (NTSC
Firmware Memory Video Encoder & Decoder De-Interlacing (NTSC-PAL) Film Mode (NTSC) Maximum Latency Video Adjustments Audio Input/Output	Flash upgradeable via RS-232 or IP 8-bit Digital Pixel-level Motion Adaptive, Diagonal Interpolation 3:2 Pulldown 1-2 frames CV/YC: Contrast, Brightness, Saturation, Hue (NTSC) 3x Unbalanced via Terminals,
Firmware Memory Video Encoder & Decoder De-Interlacing (NTSC-PAL) Film Mode (NTSC) Maximum Latency Video Adjustments Audio Input/Output	Flash upgradeable via RS-232 or IP 8-bit Digital Pixel-level Motion Adaptive, Diagonal Interpolation 3:2 Pulldown 1-2 frames CV/YC: Contrast, Brightness, Saturation, Hue (NTSC) 3x Unbalanced via Terminals, 1x Unbalanced via 3.5mm jack,

Audio Input/Output contir	
I/O Impedance	Impedance-Independent
De-embedding support	1 stereo pair at 32 kHz, 44.1 kHz, 48kHz from HDMI, 48kHz SDI
Embedded support	1 stereo pair at 48kHz
Operational Modes	
Key	Chromakey or Lumakey
Mix	PC to/from Video and SIS
PIP	Variable Window Size & Position
SDI Jitter	
SMPTE259M-C (SD-SDI)	(270Mbps: 525/625Line) Jitter < 0.1 UI
SMPTE292M (HD-SDI)	(1.485/1.4835Gbps: 720p, 1035i, 1080i, 1080p) Jitter < 0.2 UI
SMPTE424M (3G-SDI)	(2.97/2.967Gbps: 1080p50/60) Jitter < 0.3 UI
SDI Input Cable Equalizat	ion (under optimal conditions)
SMPTE259M-C (SD-SDI)	300m
SMPTE292M (HD-SDI)	166m
SMPTE424M (3G-SDI)	100m
I/O Vertical Rates - SMPT	E259M-C (SD-SDI)
525i (720x487)	59.94Hz
625i (720x576)	50Hz
I/O Vertical Rates - SMPT	E292M (HD-SDI)
720p (1280x720)	23.98, 24, 25, 29.97, 30, 50, 59.94, 60Hz
1080i (1920x1080)	50, 59.94, 60Hz
1080p (1920x1080)	23.98, 24, 25, 29.97, 30Hz
I/O Vertical Rates - SMPT	E424M (3G-SDI)
1080p (1920x1080)	50, 59.94, 60Hz
Control Methods	
Local	via Front Panel Buttons & OLED
RS-232 Interface	via D9 Female Connector
IP Interface	RJ45 Connector
Control Software included	
Warranty	
Limited Warranty	5 Years Parts and Labor
Regulatory Compliance	
Main Units	FCC Class B, CE, RoHS, UL, cUL
Main Units Power Supplies	FCC Class B, CE, RoHS, UL, cUL UL, cUL, CE, PSE, GS, RoHS
Power Supplies	
Power Supplies Mechanical	UL, cUL, CE, PSE, GS, RoHS
Power Supplies Mechanical Size (H-W-D)	UL, cUL, CE, PSE, GS, RoHS 42 x 218 x 189mm (1.63" x 8.6" x 7.4")
Power Supplies Mechanical Size (H-W-D) Weight (Net)	UL, cUL, CE, PSE, GS, RoHS 42 x 218 x 189mm (1.63" x 8.6" x 7.4")
Power Supplies Mechanical Size (H-W-D) Weight (Net) Environmental	UL, cUL, CE, PSE, GS, RoHS  42 x 218 x 189mm (1.63" x 8.6" x 7.4")  1.26 Kg (2.78 lbs) excluding PSU
Power Supplies  Mechanical Size (H-W-D)  Weight (Net)  Environmental  Operating Temperature	UL, cUL, CE, PSE, GS, RoHS  42 × 218 × 189mm (1.63" × 8.6" × 7.4")  1.26 Kg (2.78 lbs) excluding PSU  0° to +40°C (+32° to +104°F) Ambient
Power Supplies  Mechanical Size (H-W-D) Weight (Net) Environmental Operating Temperature Operating Humidity	UL, cUL, CE, PSE, GS, RoHS  42 x 218 x 189mm (1.63" x 8.6" x 7.4")  1.26 Kg (2.78 lbs) excluding PSU  0° to +40°C (+32° to +104°F) Ambient 10% to 85%, Non-condensing
Power Supplies  Mechanical  Size (H-W-D)  Weight (Net)  Environmental  Operating Temperature  Operating Humidity  Storage Temperature	UL, cUL, CE, PSE, GS, RoHS  42 x 218 x 189mm (1.63" x 8.6" x 7.4")  1.26 Kg (2.78 lbs) excluding PSU  0° to +40°C (+32° to +104°F) Ambient 10% to 85%, Non-condensing -10° to +70°C (+14° to +158°F)
Power Supplies  Mechanical  Size (H-W-D)  Weight (Net)  Environmental  Operating Temperature  Operating Humidity  Storage Temperature  Storage Humidity	UL, cUL, CE, PSE, GS, RoHS  42 x 218 x 189mm (1.63" x 8.6" x 7.4")  1.26 Kg (2.78 lbs) excluding PSU  0° to +40°C (+32° to +104°F) Ambient 10% to 85%, Non-condensing -10° to +70°C (+14° to +158°F)
Power Supplies  Mechanical  Size (H-W-D)  Weight (Net)  Environmental  Operating Temperature  Operating Humidity  Storage Temperature  Storage Humidity  Power Requirement	UL, cUL, CE, PSE, GS, RoHS  42 x 218 x 189mm (1.63" x 8.6" x 7.4")  1.26 Kg (2.78 lbs) excluding PSU  0° to +40°C (+32° to +104°F) Ambient  10% to 85%, Non-condensing  -10° to +70°C (+14° to +158°F)  10% to 85%, Non-condensing
Power Supplies  Mechanical Size (H-W-D) Weight (Net) Environmental Operating Temperature Operating Humidity Storage Temperature Storage Humidity Power Requirement External Power Supply	UL, cUL, CE, PSE, GS, RoHS  42 x 218 x 189mm (1.63" x 8.6" x 7.4")  1.26 Kg (2.78 lbs) excluding PSU  0° to +40°C (+32° to +104°F) Ambient  10% to 85%, Non-condensing -10° to +70°C (+14° to +158°F)  10% to 85%, Non-condensing  12V DC @ 1.5A
Power Supplies  Mechanical Size (H-W-D) Weight (Net) Environmental Operating Temperature Operating Humidity Storage Temperature Storage Humidity Power Requirement External Power Supply	UL, cUL, CE, PSE, GS, RoHS  42 x 218 x 189mm (1.63" x 8.6" x 7.4")  1.26 Kg (2.78 lbs) excluding PSU  0° to +40°C (+32° to +104°F) Ambient 10% to 85%, Non-condensing -10° to +70°C (+14° to +158°F) 10% to 85%, Non-condensing
Power Supplies  Mechanical Size (H-W-D) Weight (Net) Environmental Operating Temperature Operating Humidity Storage Temperature Storage Humidity Power Requirement External Power Supply	UL, cUL, CE, PSE, GS, RoHS  42 x 218 x 189mm (1.63" x 8.6" x 7.4")  1.26 Kg (2.78 lbs) excluding PSU  0° to +40°C (+32° to +104°F) Ambient  10% to 85%, Non-condensing -10° to +70°C (+14° to +158°F)  10% to 85%, Non-condensing  12V DC @ 1.5A
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Power Supplies  Mechanical Size (H-W-D) Weight (Net) Environmental Operating Temperature Operating Humidity Storage Temperature Storage Humidity Power Requirement External Power Supply	UL, cUL, CE, PSE, GS, RoHS  42 x 218 x 189mm (1.63" x 8.6" x 7.4")  1.26 Kg (2.78 lbs) excluding PSU  0° to +40°C (+32° to +104°F) Ambient  10% to 85%, Non-condensing  -10° to +70°C (+14° to +158°F)  10% to 85%, Non-condensing  12V DC @ 1.5A  1x Operations Manual on USB stick  1x PC Control Software (Microsoft Vista and above)  1x Quick Start Guide
Power Supplies  Mechanical Size (H-W-D) Weight (Net) Environmental Operating Temperature Operating Humidity Storage Temperature Storage Humidity Power Requirement External Power Supply	UL, cUL, CE, PSE, GS, RoHS  42 x 218 x 189mm (1.63" x 8.6" x 7.4") 1.26 Kg (2.78 lbs) excluding PSU  0° to +40°C (+32° to +104°F) Ambient 10% to 85%, Non-condensing -10° to +70°C (+14° to +158°F) 10% to 85%, Non-condensing  12V DC @ 1.5A  1x Operations Manual on USB stick 1x PC Control Software (Microsoft Vista and above) 1x Quick Start Guide 1x Universal Power Supply ('brick' type)
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	UL, cUL, CE, PSE, GS, RoHS  42 x 218 x 189mm (1.63" x 8.6" x 7.4") 1.26 Kg (2.78 lbs) excluding PSU  0° to +40°C (+32° to +104°F) Ambient 10% to 85%, Non-condensing -10° to +70°C (+14° to +158°F) 10% to 85%, Non-condensing  12V DC @ 1.5A  1x Operations Manual on USB stick 1x PC Control Software (Microsoft Vista and above) 1x Quick Start Guide 1x Universal Power Supply ('brick' type)
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Specifications subject to change The C2-2855 replaces the C2-2355A





# C2-2755 Specifications

Video Input					
Television Standards	NTSC, PAL, PAL-M, PAL-N, SECAM				
Composite Video	1x via BNC & 1x via Universal DVI*				
YC (S-Video)	1x via 4-Pin Mini-DIN & 1x via Universal DVI*				
HDTV	1x via HDMI (DVI 1.0, HDCP 1.4) & 1x via Universal DVI				
SD/HD/3G-SDI	1x via BNC				
Computer Inputs					
Signal Type	1x Analog via PC/HD HD15, 1x Universal DVI*				
Format	RGBHV, RGBS, RGsB, YPbPr, YUV				
Sync	TTL Level, 10K , Pos or Neg				
Termination	75 Ω				
R-G-B Level Range	0.5-2.0 Vp-p				
Scan Rate Detection	Automatic				
Analog Signals	PC to 1920x1080, HD to 1080p/60				
DVI & HDMI signals	PC to 1920x1200, HD to 1080p/60				
Max Horiz Scan Rate	150kHz				
Computer Compatibility	PC, Mac, Workstations				
Video Outputs					
Television Standards	720p, 1080i, 1080p				
YUV, YPbPr	1x via DVI-I**				
HDTV	1x via HDMI CEC pass-through for HDMI In to Out				
Maximum Latency	1-2 Frames				
Computer Outputs					
Signal Type	1x DVI-I & 1 x HDMI				
Format	RGBHV, RGBS, RGsB, YPbPr				
R-G-B Level	0.7 Vp-p				
Analog Signals	PC; 800x600/60 to 1920x1080, HD; 720p/24 to 1080p/60				
DVI & HDMI Signals	PC; 800x600/60 to 1920x1200, HD; 720p/24 to 1080p/60				
Image Processing features					
Size and Position	Automatic via Calibrate or Manual				
Image Size	User-Definable Presets				
Image Freeze	One Video Frame				
Settings Memory	Non-Volatile				
Zoom Range	Variable to 10X Zoom				
Shrink Range	Variable to 10%				
Image Mirroring	Horizontal and/or Vertical				
Horizontal Filtering	Full Digital				
Conversion Technology	Proprietary - CORIO®2				
Framerate Conversion	Temporal				
Color Resolution	24-bit (16.8 Million Colors)				
Sampling Rate	162MHz				
Digital Sampling	24-bit, 4:4:4 or 4:2:2 format subject to input source				
Firmware Memory	Flash upgradeable via RS-232 or IP				
Video Encoder & Decoder	8-bit Digital				
De-Interlacing (NTSC-PAL)	Pixel-level Motion Adaptive, Diagonal Interpolation				
Film Mode (NTSC)	3:2 Pulldown				
Maximum Latency	1-2 frames				
Video Adjustments	CV/YC: Contrast, Brightness, Saturation, Hue (NTSC), Analog RGB/YPbPr levels				
Audio Input/Output					
Inputs	3x Unbalanced via Terminals,				
	1x Unbalanced via 3.5mm jack,				
	1x HDMI, 1x Universal DVI*, 1x SDI				
Outputs	Unbalanced via Terminals,				
	1x HDMI, 1x DVI-I				

Circations			
Audio Input/Output conti			
I/O Impedance	Impedance-Independent		
De-embedding support	1 stereo pair at 32 kHz, 44.1 kHz, 48kHz from HDMI, 48kHz SDI		
Embedded support	1 stereo pair at 48kHz		
Operational Modes			
Key	Chromakey or Lumakey		
Mix	PC to/from Video and SIS		
PIP	Variable Window Size & Position		
SDI Input Cable Equalizat	ion (under optimal conditions)		
SMPTE259M-C (SD-SDI)	300m		
SMPTE292M (HD-SDI)	166m		
SMPTE424M (3G-SDI)	100m		
Input Vertical Rates - SMF	PTE259M-C (SD-SDI)		
525i (720x487)	59.94Hz		
625i (720x576)	50Hz		
Input Vertical Rates - SMF	PTE292M (HD-SDI)		
720p (1280x720)	29.97, 30, 50, 59.94, 60Hz		
1080i (1920x1080)	50, 59.94, 60Hz		
1080p (1920x1080)	23.98, 24, 25, 29.97, 30Hz		
Input Vertical Rates - SMF	PTE424M (3G-SDI)		
1080p (1920x1080)	50, 59.94, 60Hz		
Control Methods			
Local	via Front Panel Buttons & OLED		
RS-232 Interface	via D9 Female Connector		
IP Interface	RJ45 Connector		
Control Software included			
Warranty			
Limited Warranty	5 Years Parts and Labor		
Regulatory Compliance			
Main Units	FCC Class B, CE, RoHS		
Power Supplies	UL, cUL, CE, PSE, GS, RoHS		
Mechanical			
Size (H-W-D)	42 x 218 x 189mm (1.63" x 8.6" x 7.4")		
Weight (Net)	1.26 Kg (2.78 lbs) excluding PSU		
Environmental			
Operating Temperature	0° to +40°C (+32° to +104°F) Ambient		
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	12V DC @ 1.5A		
Accessories Included			
	1x Operations Manual on USB stick		
	1x PC Control Software (Microsoft Vista and above)		
	1x Quick Start Guide		
	1x Universal Power Supply ('brick' type)		
	1x Regional Power Cable		
Product Item Number			
	C2-2755		
Optional Accessories			
RM-220	Single/Dual Rackmount Kit		

Specifications subject to change The C2-2755 replaces the C2-2255A





# C2-2655 Specifications

Video Input	
Television Standards	NTSC, PAL, PAL-M, PAL-N, SECAM
Composite Video	1x via BNC & 1x via Universal DVI*
YC (S-Video)	1x via 4-Pin Mini-DIN & 1x via Universal DVI*
HDTV	1x via HDMI (DVI 1.0, HDCP 1.4) & 1x via Universal DVI*
Computer Inputs	
Signal Type	1x Analog via PC/HD HD15, 1x Universal DVI*
Format	RGBHV, RGBS, RGsB, YPbPr, YUV
Sync	TTL Level, 10K , Pos or Neg
Termination	75 Ω
R-G-B Level Range	0.5-2.0 Vp-p
Scan Rate Detection	Automatic
Analog Signals	PC to 1920x1080, HD to 1080p/60
DVI & HDMI signals	PC to 1920x1200, HD to 1080p/60
Max Horiz Scan Rate	150kHz
Computer Compatibility	PC, Mac, Workstations
Video Outputs	
Television Standards	NTSC, PAL, PAL-M, PAL-N
Impedance	75 Ω
Composite Video	1x via BNC
YC (S-Video)	1x via 4-PIN Mini-DIN
YUV, YPbPr	1x via Universal DVI*
HDTV	
TIDIV	1x via HDMI CEC pass-through for HDMI In to Out
SD/HD/3G-SDI	1x via BNC
	1-2 Frames
Maximum Latency	I-2 Fidilies
Computer Outputs	1x Lipixoroal DV/I* 9.1 x LIDMI
Signal Type	1x Universal DVI* & 1 x HDMI
Format	RGBHV, RGBS, RGsB, YPbPr
R-G-B Level	0.7 Vp-p
Analog Signals	PC to 1024x768, HD to 1080p/60
DVI & HDMI Signals	PC to 1024x768, HD to 1080p/60
Image Processing features	
Size and Position	Automatic via Calibrate or Manual
Image Size	User-Definable Presets
Image Freeze	One Video Frame
Settings Memory	Non-Volatile
Zoom Range	Variable to 10X Zoom
Shrink Range	Variable to 10%
Image Mirroring	Horizontal and/or Vertical
Horizontal Filtering	Full Digital
Conversion Technology	Proprietary - CORIO®2
Framorata Cammaian	
Framerate Conversion	Temporal
Color Resolution	24-bit (16.8 Million Colors)
	•
Color Resolution	24-bit (16.8 Million Colors)
Color Resolution Sampling Rate	24-bit (16.8 Million Colors) 162MHz
Color Resolution Sampling Rate Digital Sampling	24-bit (16.8 Million Colors) 162MHz 24-bit, 4:4:4 or 4:2:2 format subject to input source
Color Resolution Sampling Rate Digital Sampling Firmware Memory	24-bit (16.8 Million Colors) 162MHz 24-bit, 4:4:4 or 4:2:2 format subject to input source Flash upgradeable via RS-232 or IP
Color Resolution Sampling Rate Digital Sampling Firmware Memory Video Encoder & Decoder	24-bit (16.8 Million Colors) 162MHz 24-bit, 4:4:4 or 4:2:2 format subject to input source Flash upgradeable via RS-232 or IP 8-bit Digital
Color Resolution Sampling Rate Digital Sampling Firmware Memory Video Encoder & Decoder De-Interlacing (NTSC-PAL)	24-bit (16.8 Million Colors) 162MHz 24-bit, 4:4:4 or 4:2:2 format subject to input source Flash upgradeable via RS-232 or IP 8-bit Digital Pixel-level Motion Adaptive, Diagonal Interpolation
Color Resolution Sampling Rate Digital Sampling Firmware Memory Video Encoder & Decoder De-Interlacing (NTSC-PAL) Film Mode (NTSC)	24-bit (16.8 Million Colors) 162MHz 24-bit, 4:4:4 or 4:2:2 format subject to input source Flash upgradeable via RS-232 or IP 8-bit Digital Pixel-level Motion Adaptive, Diagonal Interpolation 3:2 Pulldown
Color Resolution Sampling Rate Digital Sampling Firmware Memory Video Encoder & Decoder De-Interlacing (NTSC-PAL) Film Mode (NTSC) Maximum Latency	24-bit (16.8 Million Colors) 162MHz 24-bit, 4:4:4 or 4:2:2 format subject to input source Flash upgradeable via RS-232 or IP 8-bit Digital Pixel-level Motion Adaptive, Diagonal Interpolation 3:2 Pulldown 1-2 frames CV/YC: Contrast, Brightness, Saturation, Hue
Color Resolution Sampling Rate Digital Sampling Firmware Memory Video Encoder & Decoder De-Interlacing (NTSC-PAL) Film Mode (NTSC) Maximum Latency Video Adjustments	24-bit (16.8 Million Colors) 162MHz 24-bit, 4:4:4 or 4:2:2 format subject to input source Flash upgradeable via RS-232 or IP 8-bit Digital Pixel-level Motion Adaptive, Diagonal Interpolation 3:2 Pulldown 1-2 frames CV/YC: Contrast, Brightness, Saturation, Hue (NTSC), Analog RGB/YPbPr levels
Color Resolution Sampling Rate Digital Sampling Firmware Memory Video Encoder & Decoder De-Interlacing (NTSC-PAL) Film Mode (NTSC) Maximum Latency Video Adjustments  Audio Input/Output	24-bit (16.8 Million Colors) 162MHz 24-bit, 4:4:4 or 4:2:2 format subject to input source Flash upgradeable via RS-232 or IP 8-bit Digital Pixel-level Motion Adaptive, Diagonal Interpolation 3:2 Pulldown 1-2 frames CV/YC: Contrast, Brightness, Saturation, Hue

Specifications subject to change
The C2-2655 replaces the C2-2155A, C2-2100A and C2-2105A

### The New CORIO®2 C2-2000 Series

C2-2855

C2-2755



The C2-2855 Universal Scaler Plus was the first in our new generation of high performance scalers that provides best-inclass video scaling and format conversion along with revolutionary, intuitive user interface tools. Living up to its designation as a "Universal Scaler" the C2-2855 supports SD/HD/3G-SDI, HDMI, Composite Video, YC, YUV, YPbPr or RGB, on both inputs and outputs.

- Up/Down/Cross Conversion
- · Digital Inputs: SD/HD/3G-SDI, Universal DVI\*, HDMI (DVI 1.0, HDCP 1.4)
- · Analog Inputs: YUV/YPbPr, RGB/YPbPr, CV, YC
- Digital Outputs: SD/HD/3G-SDI, Universal DVI\*, HDMI (DVI 1.0, HDCP 1.4)
- Analog Outputs: Universal DVI\* (RGB/YPbPr/YUV), CV, YC
- · Analog: PC to 1920x1080, HDTV to 1080p/60
- HDMI & DVI: PC to 1920x1200, HDTV to 1080p/60
- Supports: NTSC, PAL, PAL-M, PAL-N
- Motion Compensation & 3:2 Pulldown
- Temporal Interpolation & Diagonal Interpolation
- · Automatic Incoming Resolution Detection
- Calibrate Automatic picture sizing of PC
- 4:4:4 Full bandwidth Chroma Sampling for RGB sources. 4:2:2 for SDI, YC and CV sources. HDMI YUV support for either 4:4:4 or 4:2:2 sampling
- Video signal parameter adjustments
- Integral 4x1 Stereo Analog Audio Routing Switcher, fully integrated with digital audio
- Stereo Audio Embedding on capable outputs (Universal DVI\*, HDMI, SDI)
- RS-232 and IP Interface for Control Software
- Variable Image Zoom to 10X and Shrink to 10%
- Genlock
- Framelock
- · PIP, Chromakey and Lumakey
- · Optional Single/Dual Rackmount Kit



Living up to its designation as a "Video Scaler" the C2-2755 Video Scaler PLUS supports SD/HD/3G-SDI, HDMI, DVI, Composite Video, YC, YUV, YPbPr or RGB, on inputs and HDMI & DVI-I outputs, the signal parameters of the incoming video may be adjusted.

- Up/Down/Cross Conversion
- · Digital Inputs: SD/HD/3G-SDI, Universal DVI\*, HDMI (DVI 1.0, HDCP 1.4)
- Analog Inputs: YUV/YPbPr, RGB/YPbPr, CV, YC
- · Digital Outputs: DVI-I, HDMI (DVI 1.0, **HDCP 1.4)**
- Analog Outputs: DVI-I (RGB/YPbPr/YUV)
- Analog I/O: PC to 1920x1080, HDTV to 1080p/60
- HDMI & DVI I/O: PC to 1920x1200, HDTV to 1080p/60
- Supports: NTSC, PAL, PAL-M, PAL-N
- Motion Compensation & 3:2 Pulldown
- Temporal Interpolation & Diagonal Interpolation
- · Automatic Incoming Resolution Detection
- · Calibrate Automatic picture sizing of PC inputs
- · 4:4:4 Full bandwidth Chroma Sampling for RGB sources. 4:2:2 for SDI, YC and CV sources. HDMI YUV support for either 4:4:4 or 4:2:2 sampling
- · Video signal parameter adjustments
- Integral 4x1 Stereo Analog Audio Routing Switcher, fully integrated with digital audio
- Stereo Audio Embedding on capable outputs (DVI-I, HDMI)
- RS-232 and IP Interface for Control Software
- Variable Image Zoom to 10X and Shrink to 10%
- Genlock
- Framelock
- PIP, Chromakey and Lumakey
- · Optional Single/Dual Rackmount Kit



C2-2655

The C2-2655 Scan Converter Plus lives up to its designation as a "Scan Converter", it supports HDMI, DVI, Composite Video, YC, YUV, YPbPr or RGB, on both inputs and outputs, and SD/HD/3G-SDI on output only and the signal parameters of the incoming video may be adjusted.

- · Up/Down/Cross Conversion PC to Video
- · Digital Inputs: Universal DVI\*, HDMI (DVI 1.0, HDCP 1.4)
- · Analog Inputs: YUV/YPbPr, RGB/YPbPr,
- Digital Outputs: SD/HD/3G-SDI, Universal DVI\*, HDMI (DVI 1.0, HDCP 1.4)
- · Analog Outputs: Universal DVI\* (RGB/YPbPr/YUV), CV, YC
- Analog Input: PC to 1920x1080, HDTV to 1080p/60
- · Analog Output: PC to 1024x768, HDTV to 1080p/60
- HDMI & DVI Input: PC to 1920x1080, HDTV to 1080p/60
- · HDMI & DVI Output: PC to 1024x768, HDTV to 1080p/60
- · Supports: NTSC, PAL, PAL-M, PAL-N
- Motion Compensation & 3:2 Pulldown
- Temporal Interpolation & Diagonal Interpolation
- · Automatic Incoming Resolution Detection
- · Calibrate- Automatic picture sizing of PC inputs
- 4:4:4 Full bandwidth Chroma Sampling for RGB sources. 4:2:2 for YC and CV sources. HDMI YUV support for either 4:4:4 or 4:2:2 sampling
- Video signal parameter adjustments
- Integral 4x1 Stereo Analog Audio Routing Switcher, fully integrated with digital
- Stereo Audio Embedding on capable outputs (Universal DVI\*, HDMI, SDI)
- RS-232 and IP Interface for Control Software
- · Variable Image Zoom to 10X and Shrink to 10%
- Genlock
- Framelock
- PIP, Chromakey and Lumakey
- · Optional Single/Dual Rackmount Kit

