

CS-470 Scan Converter provides high quality computer to video scan conversion, plus a Genlock and Overlay feature. It converts computer graphics to standard NTSC or PAL video and its integral digital luminance keyer allows those graphics to be keyed over an external Composite or S-Video signal. All black areas of the image from the computer can be replaced with the external video. Choose between Hard (Solid) or Soft (Transparent) Keys with five levels of transparency. Also, the Mix Mode permits glitch-free dissolving between the computer image and external video. The dissolve rate is adjustable for both the Key and Mix Modes. Like all CORIO® products, the CS-470 has our exclusive AutoSet feature, which automatically sizes and positions the image to fit exactly onto the video screen. The CS-470's non-volatile memory retains the unit's settings, even when power to the unit is turned off.

CS-470 handles both PC and Mac computers and can be controlled from the front panel, via an Infrared Remote Unit or by the RS-232 port. Its 2X Zoom feature allows you to enlarge a quarter of the computer screen to fill the entire video screen and the Pan feature allows you to move around to any area you choose. The advanced 6-Line Digital Flicker Elimination circuitry provides crisp, clear images up to 1024x768, without line dropping, at any vertical refresh rate. It is capable of handling even higher resolutions. Video outputs are switchable between NTSC and PAL and are simultaneously provided in Composite (2 Outputs), S-Video and RGBS formats, as well as a computer monitor loop-thru. The OSD (On-Screen Display) provides ease of setup and status monitoring. A wide Subcarrier lock range and Subcarrier phase adjustment provides the flexibility needed to lock to incoming signals. The unit is housed in a rackmount case and provides BNC connectors for Composite Video and RGBS signals.

CS-450 Eclipse is a high quality computer-to-video scan conversion with genlock and overlay, much the same as the CS-470, except in a smaller package. Like all CORIO® products, the CS-450 has our exclusive AutoSet feature. The advanced 4-Line Digital Flicker Elimination circuitry provides crisp, clear images up to 1024x768, without line dropping, at any vertical refresh rate. Video outputs are switchable between PAL and NTSC and are simultaneously provided in Composite, S-Video and RGBS formats, as well as a computer monitor loop-thru. The OSD (On-Screen Display) provides ease of setup and status monitoring. The unit is housed in a plastic case and provides RCA connectors for Composite Video and an HD-15 for the RGBS output.



CS-470



CS-450



CS-460

Input/Output Cable Assemblies

Key Features of the CS-450, CS-460, CS-470

- Automatic incoming resolution detection
- AutoSet® - Automatic picture sizing
- Genlock and Overlay Feature
- User Definable Overscan/Underscan
- PAL, NTSC Television Standards
- Composite and S-Video Input/Output
- RS-232 Interface and Windows Control Panel
- IR Remote Control (Optional on CS-460)
- Image 2X Zoom and 100% Pan Coverage
- Rackmount, Desktop or PCI/ISA Card Versions

CS-460 Eclipse Internal is a PCI version of the product. It also fits into an ISA slot. The internal version was designed specifically for system integration, so the card removes the need for external power supplies and greatly reduces the length of cables usually required from the PC to the unit. The card slot in the computer is used solely for holding the unit in place and no data or power connections are made to either of them via the bus. This prevents bus signal or timing compatibility issues, and means that the unit can even be mounted in other types of enclosures. The internal version takes power from a spare hard disk drive connector. It is supplied with video breakout cables, so you still have the same range of signals as the external version. Standard control is via RS-232 (a 9-Pin D serial cable is included to connect to the PC), using either your own software or our CORIO® Control Panel software. An IR Remote Control is available as an option and requires the optional Infrared Receiver Module to work.

Specifications

Computer Video Input

Signal Type	RGBHV
Termination	Auto-terminating into 75Ω
Connector	1x HD-15 Female
R-G-B Level Range	0.5-2.0 Vp-p
Scan Rate Detection	Automatic
Maximum Resolution	1600x1200
Max Without Line Drops	1024x768
Max Vert Refresh Rate	
@ 640x480	210Hz
@ 800x600	170Hz
@ 1024x768	130Hz
@ 1280x1024	100Hz
@ 1600x1200	85Hz
Max Horiz Scan Rate	100KHz
Computer Compatibility	CS-450/470 - PC, Macintosh CS-460 - PC

Genlock/Overlay Input

Composite Video	1x via RCA (BNC for CD-470)
S-Video	1x via 4-Pin Mini-DIN Connector
Subcarrier Lock Range	+/- 200Hz for NTSC Operation (+/- 250Hz for PAL Operation)
Subcarrier Phase	+/- 12° Adjustment

Video Outputs

Television Standards	PAL-B/G, NTSC
Impedance	75Ω
Composite Video	1x via RCA for CS-450, CS-460 2x via BNC for CS-470
S-Video (Y/C)	1x via 4-PIN Mini-DIN
RGBS	1x (Note 3)
Computer Loop-thru	1x via HD-15 Female Connector

General

Size and Position	Automatic via AutoSet or Manual
Underscan/Overscan	User-Definable Presets
Image Freeze	One Video Frame
Settings Memory	Non-Volatile
Zoom/Pan Range	2X Zoom & 100% Pan Coverage
Flicker Filter- Selectable	2 or 4 Line for CS-450, CS-460 2, 4 or 6 Line for CS-470
Horizontal Filtering	Full Digital
Conversion Technology	Proprietary – CORIO®
Color Resolution	24-bit (16.8 Million Colors)

Control Methods

Local (Except CS-460)	via Front Panel Buttons & OSD
RS-232 Interface	via 5-Pin Mini-DIN
Infrared Remote	via IRC-4 Remote Unit (Note 2 - Optional for CS-460)

Warranty

Limited Warranty	2 Years Parts and Labor
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Regulatory Approvals

Scan Converter Units	FCC, CE
Power Supplies	UL, CE, CSA

Mechanical

CS-470 Size (H-W-D)	1.75"x9"x6.75" (44x230x147mm)
Weight (Net)	3.0 lbs (1.4 kg)
Case Material	Metal
CS-450 Size (H-W-D)	1.25"x7.25"x4" (32x185x102mm)
Weight (Net)	10 oz (280 g)
Case Material	Molded Plastic
CS-460 Size (H-L)	3.25"x8.5" (82x215mm)
PC Slot Required	Full Length – PCI or ISA

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

Power Requirement

CS-470	100-240VAC, 50-60Hz, 10W
CS-450	12VDC@350mA
CS-460 (from PC)	12VDC@350mA

Accessories Included – CS-470

1x C-Video Cable	6' (2m) BNC to BNC
1x S-Video Cable	6' (2m) 4-Pin S-V to 4-Pin S-V
1x VGA Cable	3' (1m) HD15 Male to Male
1x IR Remote	IRC-4
1x Operations Manual	
1x AC Power Cord	US, UK or Euro or Type

Accessories Included – CS-450

1x C-Video Cable	6' (2m) RCA to RCA
1x S-Video Cable	6' (2m) 4-Pin S-V to 4-Pin S-V
1x VGA Cable	3' (1m) HD15 Male to Male
1x IR Remote	IRC-4
1x Operations Manual	
1x AC Power Adapter	US, UK or Euro or Type

Accessories Included – CS-460

1x CV-SV I/O Assembly	HD-15 to 2x RCA, 2x 4-Pin Mini and 1x SCART (Out)
1x VGA I/O Assembly	HD-15M to 2x HD-15F
1x Serial Cable (Note 1)	1' (30cm) 5-Pin Mini-DIN to DB-9
1x Operations Manual	

Product Item Numbers

CS-470	Rackmount Case
CS-450	Plastic Case
CS-460	Internal

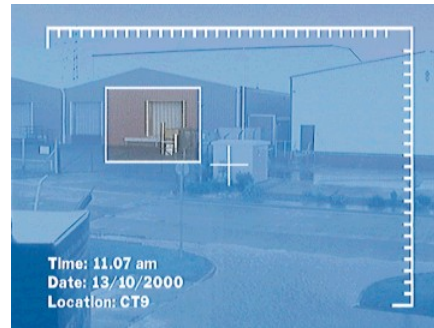
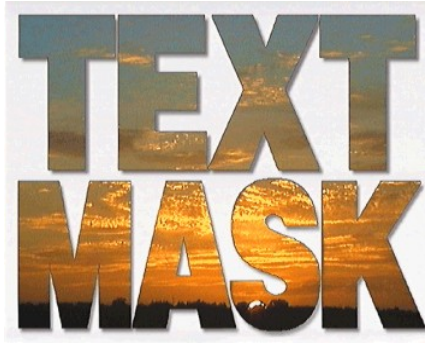
Optional Accessories

Serial Cable	Opt for CS-460/470 (Std for CS-450)
IR Remote Sensor	Required for CS-460 IR Operation
IRC-4 IR Remote Unit	Opt for CS-460/470 (Std for CS-450)

Notes

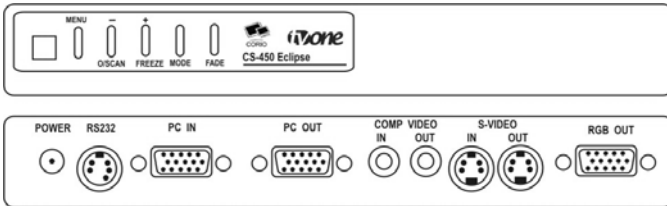
- (1) CS-460 includes CA-RS2 Serial Cable to connect the card to the host PC. CA-RS2 is optional for CS-450.
- (2) CS-460 requires optional IRR-104 Remote Sensor and IRC-4 Remote Unit for IR Remote Control operation.
- (3) RGB Out is computer image only, with no video overlay. RGB Out on CS-450 is via HD15F connector. RGB Out on CS-460 is via breakout cable.

Examples of Genlock/Overlay Feature



Panel Drawings

CS-450



CS-460



CS-470

