



## FOUR UNIVERSAL SCALERS IN ONE PACKAGE

### QUADRA UDC 400

**Multi-Channel Signal Converter and Synchronizer**

**FOUR INDEPENDENT CHANNELS:**

**Up convert and down convert**

**RGB, HDTV, S-Video, NTSC/PAL inputs**

**Inputs / outputs to 1600 x 1200 pixels**

**Optional DVI inputs**

**100 X zoom**

**RGB / DVI outputs**

**Ethernet and RS-232 control**

**Compact 1RU chassis**

The Quadra™ UDC 400 sets a new standard for multi-format scan conversion and scaling with a full range of digital and analog inputs/outputs, four independent processing channels, the option of synchronized outputs, and the smallest footprint in its class.

When using DVI inputs and outputs, the Quadra offers a completely digital path from signal source to display. Even when converting an analog signal, a DVI output means fewer A/D and D/A conversions, resulting in higher quality output.

The Quadra offers four real time scalers in a single 1RU enclosure. Each channel is capable of scaling or converting different RGB, DVI, HDTV, and standard video signals.

The unit accepts inputs up to 1600 x 1200 pixels and converts them to any RGB or DVI format. All output signal parameters are user-selectable, including line rate, frame rate, interlacing and blanking.

Pan and zoom functions allow selective extraction of any portion of an image for cropping or aspect ratio adjustment. Conversion to lower line rate signals can be executed by extracting a portion of the original signal, or by down-converting the entire raster, or a combination of extraction and down-conversion.

All functions are easily set up and controlled using a command line interface from either the RS-232 or Ethernet ports.

Built on RGB Spectrum's long tradition of quality and reliability in mission critical applications, the Quadra is an excellent solution for all signal conversion requirements.

**UNIVERSAL SCALING:**

Interlaced ↔ non-interlaced

875 ↔ 525 line

FLIR ↔ RGB

RGB analog ↔ DVI digital

Aspect Ratio ↑↓

Line rate ↑↓

Video → RGB / HDTV

Specifications

Input Signals

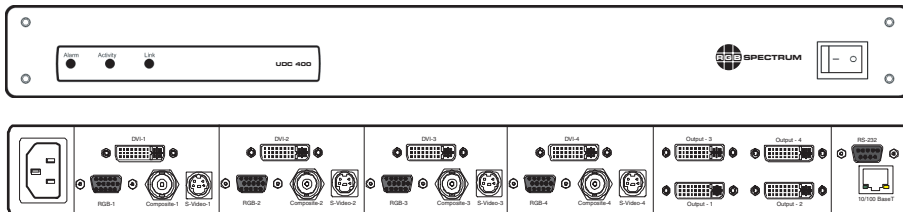
Type / Number	4 x RGB / Y P <sub>b</sub> P <sub>r</sub> / HDTV 4 x DVI (optional) 4 x NTSC/PAL composite 4 x S-Video
Resolution	640 x 480 to 1600 x 1200 pixels 720p and 1080i HDTV
Horizontal scan rate	12 kHz to 125 kHz interlaced or non-interlaced
Pixel clock (Max)	165 MHz
Video levels	0.7 V p-p
Sync type	Sync on green, separate composite sync, or separate H-drive and V-drive
Connectors	RGB: 15-pin HD D-Sub (female) DVI: 24-pin DVI-D Composite: BNC (female) S-Video: 4-pin mini DIN (female)

Output Signals

Type / Number	4 x RGB analog 4 x DVI digital
Resolution	640 x 480 to 1600 x 1200 pixels
Horizontal scan rate	12 kHz to 125 kHz interlaced or non-interlaced
Pixel clock (Max)	165 MHz
Video levels	0.7 V p-p
Sync type	Sync on green, separate composite sync, or separate H-drive and V-drive
Connectors	Analog and digital: 29 pin DVI-I

Other

Power	85 - 264 VAC auto range 47 Hz - 440 Hz Less than 65 W
Control	Ethernet 10/100 BASE-T RS-232
Size	1 RU Width 17.25" (43.8 cm) Depth 15.3" (38.9 cm) Height 1.75" (4.5 cm)
Rackmount	Rackmount kit included
Weight	Approximately 14 lbs. (6.3 kg.)



Front and Rear Panels with Optional DVI Inputs