

# Emerge® VSM2000 Multi-Function Video Scaler



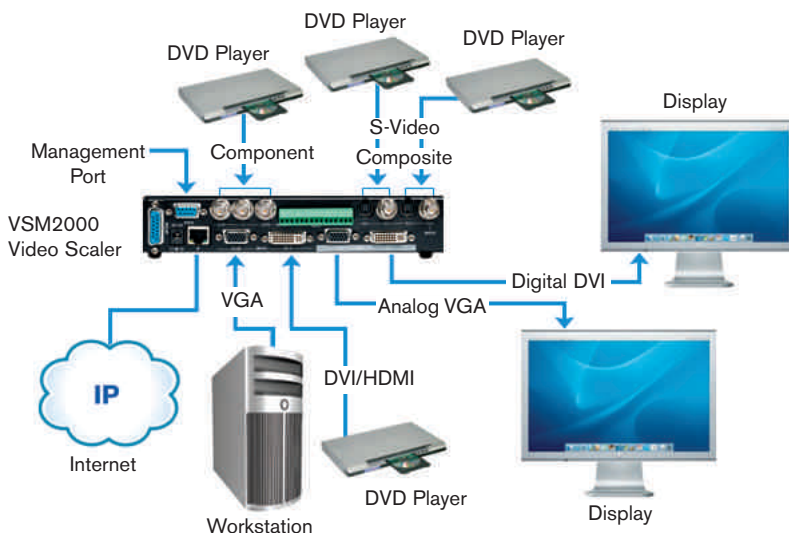
## Presentation switcher

The Avocent EmERGE VSM2000 multi-function video scaler provides high scaling to analog or DVI computer or HDTV signals. NTSC and PAL video standards are supported. Video inputs are 2x composite, 2x s-video and 1x YUV component or YPbPr. RGB/YPbPr scaling permits the computer input signals to be scaled with the same flexibility as the video inputs. The output is selectable as any computer resolution up to 2048 x 2048 at any vertical refresh rate and all HDTV resolutions up to 1080p. A wide variety of computer signal formats are available to support PC, Mac and workstation formats.

All the functions can be controlled via front panel push buttons, an infrared controller or via an RS-232 or IP connection. A Windows control panel is provided for GUI-based control. Most third party control systems interface directly with the VSM2000 video scaler via serial or RS-232 interfaces. A front panel LCD makes setup easy.

Variable zoom to 10X allows you to enlarge any part of the video image to fill the entire computer screen and panning controls allow you to move around to any area desired. Variable shrink to as little as 10% allows fitting the image onto most displays. The advanced digital flicker elimination circuitry and high sampling rate insures crisp, clear images, while full bandwidth chroma sampling insures faithfully reproduced, high resolution colors.

Stereo audio switching is provided by an integral 4 x 1 audio routing switcher. The four impedance-independent unbalanced inputs follow the video input selection. A rear panel terminal block provides access.



## KEY FEATURES

- Automatic Incoming Resolution Detection
- Analog Computer Input via HD-15 Connector
- DVI-D Computer Input via DVI-I Connector
- Inputs: 2x CV, 2x YC, 1x YUV/YPbPr Component
- Scaling of the RGB or YPbPr Input Signal
- Analog PC to 2048 x 2048, HDTV to 1080p
- DVI PC to 1280 x 1024, HDTV to 1080p/30
- AutoSet® - Automatic Picture Sizing
- Multiple Worldwide Television Standards
- 2x Outputs HD15 (RGB or YPbPr) DVI-I (Analog and Digital)
- Integral 4x1 Stereo Audio Routing Switcher
- RS-232 & IP Interface and Windows Control Panel
- IR Remote Control
- Variable Image Zoom to 10X and Shrink to 10%
- Optional Single/Dual Rackmount Kit
- Optional Input Expansion for additional inputs



This symbol on a product indicates that it is powered by CORIO2™ technology, the most flexible video processing engine now available.

# EMERGE® VSM2000 MULTI-FUNCTION VIDEO SCALER

## Technical Specifications

### VSM2000: Mechanical / Power / Environmental

**Size:** 5.80" (147 mm) D, 8.60" (218 mm) W, 1.60" (41.5 mm) H  
**Shipping Weight:** 2.6 lbs (1.20 Kg)  
**Power (External Power Supply):** 12VDC@1A  
**Operating Temperature:** 40°F (4°C) to 113°F (45°C)  
**Humidity:** 10% to 85% (Non-condensing)

### VSM2000: Video Inputs

**Television Standards:** NTSC, PAL, PAL-M, PAL-N, SECAM  
**Composite Video:** 2x via BNC  
**S-Video (YC):** 2x via 4-Pin Mini-DIN  
**YUV /YPbPr:** 1x via 3-BNC

### VSM2000: Computer Inputs

**Signal Type:** 1x Analog via HD-15 Female, 1x DVI-D via DVH Connector  
**Format:** RGBHV, RGBS, RGsB, YPbPr  
**Sync:** TTL Level, 10KU, Pos or Neg  
**Termination:** Auto-terminating into 75U  
**R-G-B Level Range:** 0.5-2.0 Vp-p  
**Scan Rate Detection:** Automatic  
**PC Resolutions:** Any up to 2048 x 2048  
**HDTV Resolutions:** Any up to 1080p  
**Max Horiz Scan Rate:** 150KHz  
**Computer Compatibility:** PC, Macintosh, Workstations

### VSM2000: Computer Outputs

**Signal Type:** 1x Analog via HD-15 Connector, 1x DVH via DVH Connector  
**Format:** RGBHV, RGBS, RGsB, YPbPr  
**R-G-B Level:** 0.7 Vp-p  
**Analog Signals:** PC to 2048 x 2048, HD to 1080p  
**DVI Signals:** PC to 1280 x 1024, HD to 1080p/30  
**Vertical Refresh Rate:** Any to 250Hz

### VSM2000: General

**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%

**Image Mirroring:** Horizontal and/or Vertical

**Horizontal Filtering:** Full Digital

**Color Resolution:** 24-bit (16.8 Million Colors)

**Digital Sampling:** 24-bit, 4:4:4 format

**Firmware Memory:** Flash, Upgradeable via RS-232

**Video Decoder:** 9-bit Digital

**De-Interlacing (NTSC-PAL):** Pixel-level Motion Adaptive

**Comb Filter Decoding:** Adaptive

**Film Mode (NTSC):** 3:2 Pulldown

**Video Adjustments:** Contrast, Brightness, Saturation, Hue (NTSC), R-G-B Levels

### VSM2000: Audio Input/Output

**Inputs:** 4x Unbalanced via Terminals

**Output:** Unbalanced via Terminals

### VSM2000: Control Methods

**Local:** Via Front Panel Buttons and OSD

**RS-232 Interface:** Via D9 Female Connector

**IP Interface:** RJ45 Connector

**Infrared Remote:** Via IRC-4 Remote Unit

**Input Expansion Control:** Via D-15 Options Connector

### Standards

**Main Unit:** FCC, CE, RoHS

**Power Supply:** UL, CE, CSA, RoHS

### Warranty

Two years

## Ordering Details

Part Number	Description
VSM2000	Video Scaler
<b>Accessories</b>	
RMK-61	Rack Mount Kit



VSM2000 Video Scaler (Front)



VSM2000 Video Scaler (Back)

The Avocent Emerge VSM2000 multi-function video scaler provides high scaling to analog or DVI computer or HDTV signals.



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