

Extron Electronics

INTERFACING, SWITCHING AND DISTRIBUTION



Autoscanning to
1280 x 1024 @ 81 kHz

NTSC and PAL output

VGA/MAC input

Variable zoom
control

Horizontal and vertical
centering/size controls

Horizontal and vertical
filtering

High quality 24 bit
color sampling

Memory presets

RS-232 control

Genlock

Digital 4:2:2 output
(VSC 200D)



APPLICATIONS



VSC 200D SCAN CONVERTER

The **VSC 200** high resolution scan converter features, technology, performance and value that fulfill the requirements of even the most demanding applications. It is ideal for down-converting computer images from up to 1280 x 1024, whether for purposes of recording, videoconferencing or viewing the image on an NTSC or PAL monitor or other display device. The **VSC 200D** has an additional digital output module for connecting to D-1 decks or digital video editing stations. No matter what the application, the **VSC 200** provides a broadcast-quality, flicker-free image.

Extron's **VSC 200** has four levels of horizontal and five levels of vertical user-selectable filters. Since vertical filtering reduces flicker, the **VSC 200** produces a solid, stable image. Horizontal filtering assures that no detail is dropped during scan conversion. The **VSC 200** features 24 bit sampling, providing 8 bits per color for true 16.8 million color reproduction. If your display device can handle that level of detail, this is the scan converter for you.

The **VSC 200** automatically scans resolutions up to 1280 x 1024, with horizontal scan rates up to 81 kHz and vertical frequencies to 120 Hz. With VGA and MAC inputs, and composite, S-Video, component and RGBHV outputs (plus a digital, 4:2:2 output in the **VSC 200D** model), the **VSC 200** is compatible with most computers and any display device on the market. This versatility is critical if the images from various computers and workstations must be scan converted.

The **VSC 200**'s variable zoom control, horizontal and vertical centering and pan controls, image freeze button and other features provide extensive control over image output. These features, coupled with an increased pixel clock zoom rate, go beyond 2x zoom. The

APPLICATIONS (Cont.)

pan and centering controls are of critical importance when showing very detailed parts of CAD diagrams during a videoconferencing session, for example.

With the addition of a digital 4:2:2 output, the **VSC 200D** model is identical to the **VSC 200**; both feature a genlock option which locks the converted video output to the sync generators of devices that are connected to the scan converter. This feature is especially useful in broadcast applications or anytime video equipment must be perfectly synchronized.

FEATURES

- **Autoscanning**— Automatically recognizes and converts all incoming computer images, up to 1280 x 1024 resolution, 81 kHz horizontal and 120 Hz vertical scan rates.
- **NTSC and PAL output**— The **VSC 200** is compatible with any display device using NTSC or PAL video.
- **VGA/MAC input**— Unique input configuration allows for quick and easy connection to most computers. The passive local monitor output allows the user to display images on the local monitor as video plays simultaneously on the display device.
- **Dynamic zoom control**— Increased pixel clocking is used for variable zoom in order to provide greater detail of the displayed image.
- **Horizontal and vertical controls**— Provides controls for sizing and keeping the image centered. This allows great flexibility for panning across the image while zooming.
- **Horizontal and vertical filtering**— Provides four levels of horizontal and five levels of vertical user-selectable filter controls. This reduces flicker and assures no picture detail is dropped during scan conversion.
- **High quality color sampling**— The **VSC 200** features 24 bit sampling, providing 8 bits per color for true 16.8 million color reproduction. If your display device can

FEATURES (Cont.)

handle that level of detail, this is the scan converter for you.

- **Memory presets**– The VSC 200’s memory feature allows the scan converter to automatically call up 30 user presets. An additional 100 are set at the factory. This allows greater functionality when converting images from several types of computers.
- **RS-232 control**– The VSC 200 has RS-232 control for third party remote control of any of its features and functions. RS-232 is easily programmable using Extron’s Simple Instructions Set (SIS™).
- **Outputs**– Extron’s VSC 200 outputs NTSC and PAL video as composite, Y/C (S-Video), component (R-Y, B-Y, Y) and RGBHV outputs.
- **Genlock**– Genlock capabilities allow for the integration of the scan converted images into a professional broadcast environment.
- **Cables included**– The VSC 200 includes input adapter cables for VGA and Mac computer video and 4 pin din (S-video) output cables.
Included Cables
 BNC 75ohm termination plug Part# 26-300-01
 Mac/VGA cable, 6 feet Part# 26-462-01
 Mac/13W3 cable, 6 feet Part# 26-465-01
 VGA/13W3 cable, 1 foot Part# 26-466-01
 S-Video cable, 6 feet Part# 26-316-02

VSC 200D includes all the above plus:

- **Digital video output**– A digital 4:2:2 output module has been added to the VSC 200D for output to a D-1 deck or digital video editing station.

SPECIFICATIONS

Video input

Number/type	1 RGBHV, RGBS and RGsB Mac and VGA
Connectors	1 15-pin D female and 1 15-pin HD female + adapter cables

SPECIFICATIONS (Cont.)

Nominal level(s)	Analog — 0.7V to 1.0V p-p
Maximum level(s).....	Analog — 0.75V to 1.05V p-p
Impedance	75 ohms, High Z (switchable)
Horizontal frequency	Autoscan 24 kHz to 81 kHz
Vertical frequency.....	Autoscan 50 Hz to 120 Hz
Resolution range.....	Autoscan 560 x 384 to 1280 x 1024
Sampling	24 bit, 8 bits per color
External sync (genlock).....	0.3V to 1.0V p-p

Video processing

Encoder	10 bit digital
Digital sampling.....	24 bit, 8 bits per color
Colors.....	16.8 million
Horizontal filtering.....	4 levels
Vertical filtering	5 levels

Video output

Number/type/format	1 RGBHV/RGBS/RGsB or component video, or 1 digital component video (CCIR 601/ITU-R BT.601) (VSC 200D only), or 1 S-video, or 1 NTSC/PAL composite video
Connectors	5 BNC female RGB HV/RGBS/RGsB or component video 1 BNC female digital video – VSC 200D only 1 4-pin mini-DIN female S-video 1 BNC female composite video
Nominal level	RGBHV/RGBS/RGsB 0.7V p-p S-video and composite1.0Vp-p
Impedance	75 ohms

Sync

Input type	Autodetect RGBHV, RGBS and RGsB
Output type	RGBHV, RGBS, RGsB
Genlock connectors	1 BNC female genlock input 1 BNC female genlock output (terminate w/75 ohms if unused)
Standards	NTSC and PAL

SPECIFICATIONS (Cont.)

Input level 0.3V to 5.0V p-p
 Output level 5V p-p
 Input impedance 75 ohms
 Output impedance 75 ohms
 Polarity..... Negative

Control/Remote — scan converter

Serial control port RS-232, 9-pin female D connector
 Baud rate and protocol 9600, 8-bit, 1 stop bit, no parity
 Pin configurations 2 = TX, 3 = RX, 5 = GND
 Program control Extron's Simple Instruction Set - SIS™

General

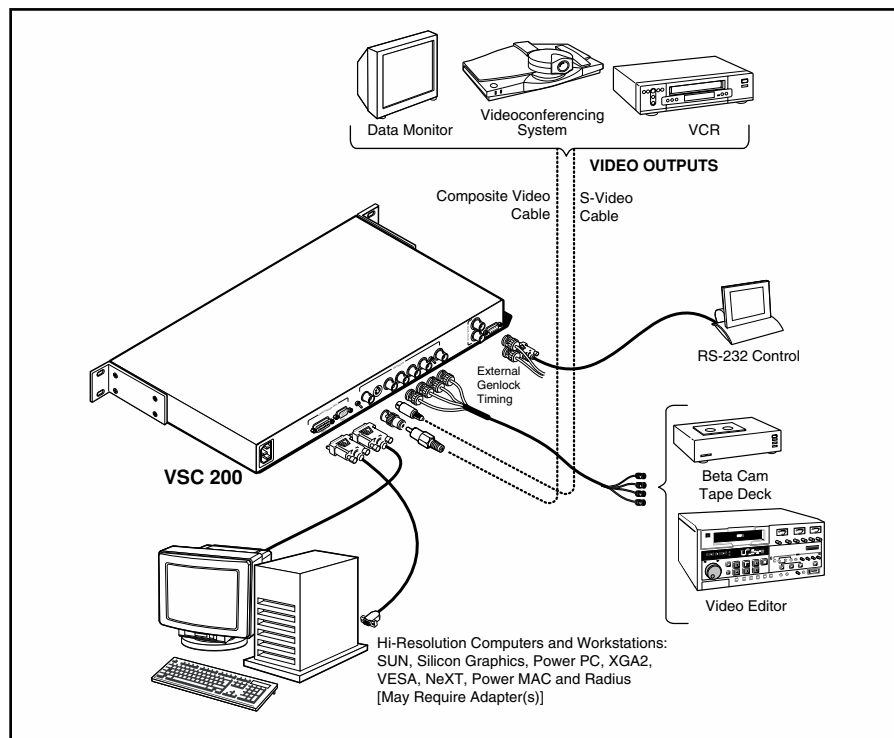
Power 100VAC to 240VAC, 50/60 Hz, 30 Watts, internal, auto-switchable

SPECIFICATIONS (Cont.)

Temperature/humidity Storage -40° to +158°F (-40° to +70°C) / 10% to 90%, non-condensing
 Operating +32° to +122°F (0° to +50°C) / 10% to 90%, non-condensing
 Rack mount Yes (with included kit)
 Enclosure type Metal
 Enclosure dimensions 1.75" H x 17.5" W x 9.5" D
 4.5 cm H x 44.5 cm W x 24.1cm D
 Shipping weight 11 lbs (5 kg)
 Vibration NSTA 1A in carton (National Safe Transit Association)
 Approvals UL, CUL, CE, FCC Class A & B
 MTBF 30,000 hours (demonstrated)
 Warranty 2 years parts and labor

Specifications are subject to change without notice.

APPLICATION DIAGRAM



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