

# Extron Electronics

INTERFACING, SWITCHING AND DISTRIBUTION



VSC 100 & VSC 100GX - HIGH RESOLUTION SCAN CONVERTERS

Autoscanning  
up to 1152 x 900

2 horizontal  
(aliasing) filters

3 vertical  
(flicker) filters

Centering/pan control

Zoom/overscan/  
underscan

60 auto memory  
locations

Internal power supply

VGA/Mac input

Outputs composite,  
S-video & RGBH/HV

Genlock capability (GX)

Component output (GX)



# APPLICATION

Extron's VSC 100 high resolution computer to video scan converter provides a professional quality image. Combining exceptional performance and value, the VSC 100 is ideal for scan converting computer images up to 1152 x 900 for recording, videoconferencing or viewing the image on an NTSC or PAL monitor or other display device. The VSC 100 has two user-selectable levels of horizontal filtering to reduce detail loss and three user-selectable levels of vertical filtering to reduce flicker. The VSC 100 autoscans resolutions up to 1152 x 900, horizontal scan rates up to 70 kHz and vertical scan rates up to 120 Hz. With VGA and Mac inputs and composite, S-video and RGBHV outputs, the VSC 100 is compatible with most computers and any display device on the market. The VSC 100GX model is identical to the VSC 100 but features an additional component output and a genlock option which allows the VSC 100GX to be sync-locked with other devices for seamless vertical interval switching.

Today's A/V community requires scan converters to provide extensive control over image output. The VSC 100's zoom switch, horizontal and vertical centering/pan controls, image freeze button and other features provide that control and more. The three-position zoom switch offers overscan, underscan and 2x zoom. In the zoom mode, the horizontal and vertical centering controls become variable pan controls, allowing for detailed imaging and panning of the picture—vital when showing detailed sections of CAD diagrams during a videoconference. The VSC 100's memory feature automatically saves and recalls horizontal and vertical centering settings for up to 60 factory/user presets.

# FEATURES

- **Autoscanning**— Recognizes and converts the computer image, up to 1152 x 900 resolution, 70 kHz horizontal and 120 Hz vertical scan rates.
- **NTSC and PAL output**— The VSC 100 is compatible with NTSC or PAL.
- **VGA/Mac input**— Accepts 15-pin D and HD connectors for easy connection to any Macintosh or IBM-compatible computer. The passive local monitor output allows the user to display images on the local monitor as video plays simultaneously on the display device.
- **Three setting zoom switch**— Can be used for overscan, underscan or as a 2x zoom switch, to give greater control over the image displayed. Increased pixel clocking is used to give greater quality of the image displayed.
- **Horizontal and vertical centering/pan controls**— Provides controls to center the image. In zoom mode, the horizontal and vertical controls allow the user to pan across the image for greater flexibility in showing detail.
- **Horizontal and vertical filtering**— Two user-selectable levels of horizontal filtering and three levels of vertical filtering to reduce flicker and minimize loss of picture detail.
- **Outputs**— Extron's VSC 100 outputs NTSC and PAL video as composite, S-video and RGBH/HV outputs.
- **Cables included**— The VSC 100 includes an input adapter cable for Mac and VGA and a 4 pin DIN (S-video) output cable.

VSC 100GX includes all of the above features plus:

- **Genlock**— Allows for the integration of the scan converted images into a professional broadcast environment. Genlocking provides for seamless, vertical interval switching of these converted high resolution sources, and other video sources.
- **Component output**— For use in professional broadcast applications or high quality output for video recording.

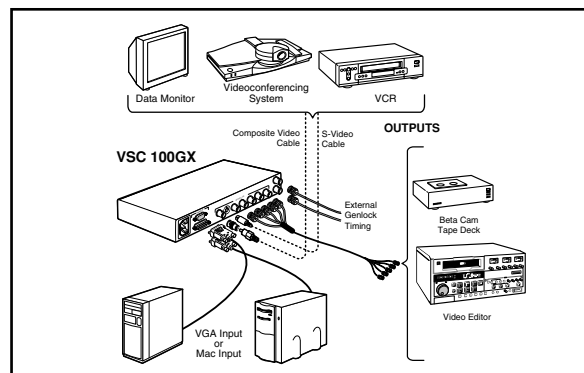
# SPECIFICATIONS

<b>Video Input</b>	
Number/type .....	1 VGA, 1 Mac (both RGB)
Connectors.....	VGA: 15-pin HD female Mac 15-pin D female
Nominal level(s) .....	Analog — 0.7V to 1.0V p-p
Maximum level(s) .....	Analog — 0.75V to 1.05V p-p
Impedance .....	High Z or 75 ohms (DIP switch-selectable)
Horizontal frequency .....	Autoscan 24 kHz to 70 kHz
Vertical frequency .....	Autoscan 50 Hz to 120 Hz
Resolution range .....	Autoscan 560 x 384 to 1152 x 900
External sync (genlock) .....	0.3V to 4.0V p-p

# SPECIFICATIONS (Cont.)

<b>Video processing</b>	
Encoder .....	10 bit digital
Digital sampling.....	24 bit, 8 bits per color; 40 MHz
Colors .....	16.8 million
Horizontal filtering .....	2 levels
Vertical filtering .....	3 levels selectable per each view mode
<b>Video output</b>	
Number/type/format .....	1 RGBHV/RGBS/RGB 15.75 kHz analog or 1 component video (VSC 100GX only), or 1 S-video: 15.75 kHz, 525/625 lines, or 1 composite video (NTSC): 15.75 kHz, 525 lines, or 1 composite video (PAL): 15.5 kHz, 625 lines
(PAL B, D, G, H, I)	
Connectors .....	RGBS/RGBHV: 4 or 5 BNC female S-video: 1 4-pin mini-DIN female Component video: 3 BNC female (VSC 100GX only) (1 component video uses the R, G, and B BNCs) NTSC/PAL composite: 1 BNC female RGBHV/RGBS, component 0.7V p-p
Nominal level .....	1.0V p-p
S-video, composite video .....	75 ohms
Impedance .....	75 ohms
<b>Sync</b>	
Input type .....	Autodetect RGBHV, RGBS, RGB
Output type.....	RGBHV, RGBS
Standards .....	NTSC and PAL
Input level .....	0.3V p-p
Output level .....	5.0V p-p
Input impedance .....	75 ohms
Output impedance .....	75 ohms
Polarity.....	Negative
<b>General</b>	
Power .....	100VAC to 240VAC, 50/60 Hz, 15 Watts, internal, auto-switchable
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 .....	No
Enclosure type .....	Metal
Enclosure dimensions .....	2.0" H x 9.0" W x 6.25" D 5.08 cm H x 22.86 cm W x 15.88 cm D (Add 0.5" for front panel knobs and 0.75" for rear panel connectors.)
Shipping weight .....	6 lbs (2.7 kg)
Vibration .....	NSTA 1A in carton (National Safe Transit Association)
Approvals .....	UL, CUL, CE, FCC Class B
MTBF .....	30,000 hours
Warranty .....	2 years parts and labor
<b>Part numbers</b>	
VSC 100 .....	60-273-02
VSC 100GX .....	60-273-01

## APPLICATION DIAGRAM



EXTRON ELECTRONICS/RGB SYSTEMS, INC.  
1230 South Lewis Street, Anaheim, CA 92805  
800.633.9876 714.491.1500 FAX 714.491.1517  
U.S.A.

EXTRON ELECTRONICS, EUROPE  
Beeldschermweg 6C, 3821 AH Amersfoort  
+31.33.453.4040 FAX +31.33.453.4050  
The Netherlands

EXTRON ELECTRONICS, ASIA  
41B Kreta Ayer Road, Singapore 089003  
+65.226.0015 FAX +65.226.0019  
Singapore

EXTRON ELECTRONIC INFORMATION  
EXTRONWEB™: www.extron.com  
EXTRONFAX™: 714.491.0192  
24-hour access—worldwide!