

# Extron Electronics

INTERFACING, SWITCHING AND DISTRIBUTION



**DVS 150 - DIGITAL VIDEO SCALER**

Up scales to native resolutions

Compatible with NTSC/PAL/SECAM

Composite video, S-video, and component video inputs

15-pin HD pass-through input

Computer-video, HDTV, and plasma output rates

Exclusive variable top and bottom vertical blanking

Decoder with three-line adaptive comb filter

Color, tint, contrast, sharpness, and brightness controls

Horizontal and vertical shift controls

Detail control

RS-232 control



# APPLICATIONS

Using advanced digital video scaling technologies, Extron's **DVS 150** converts NTSC/PAL/SECAM video signals into high-resolution video for viewing on digital displays such as LCD, DLP, and plasma monitors and projectors. To optimize image quality on digital displays as well as maintain maximum image brightness and detail, lower-resolution NTSC/PAL/SECAM video resolutions need to be scaled up to match the "sweet spot" or native resolution of digital displays. The DVS 150 accepts composite video, S-video, or component video and offers a wide variety of RGB resolution output rates to match different computer-video, progressive HDTV, and plasma resolutions. The DVS 150 provides a 15-pin HD signal pass-through connector to allow a computer-video or RGB source to be switched, as well as three video sources. The pass-through signal is available simultaneously on a 15-pin HD connector and six BNCs.

The rack-mountable DVS 150 features Extron's exclusive variable top and bottom vertical blanking. During scaling, captioning and tapehead switching in the video's blanking area show up as picture noise. Using variable blanking, a user may add black lines at the top and bottom of the screen to eliminate edge noise.

Scaled RGB outputs are available simultaneously on a 15-pin HD connector and six BNCs. The DVS 150 offers scalable outputs at these computer-video rates: 640 x 480, 800 x 600, 832 x 624, 1024 x 768, and 1280 x 1024. Progressive HDTV output rates: 480p, 720p, and 1080p are available. To match the resolutions and timings of plasma displays from Fujitsu, NEC, Pioneer, and others, the DVS 150 provides these plasma output rates: 848 x 480, 852 x 480, 1280 x 768, and 1360 x 765.

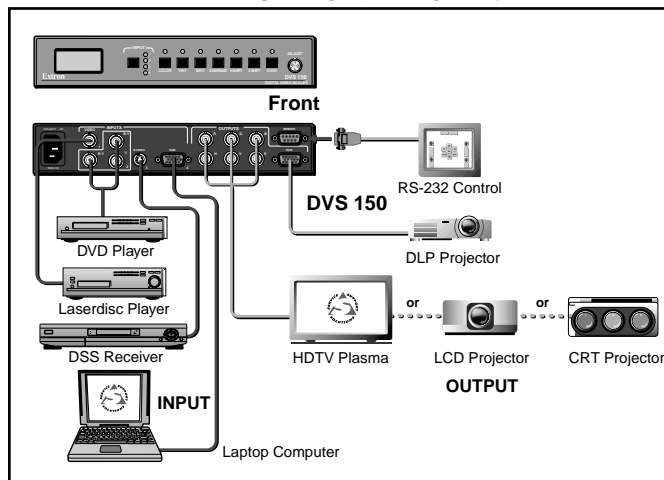
# FEATURES

- **Scaled inputs** – The DVS 150 is compatible with NTSC 3.58, NTSC 4.43, PAL, and SECAM. The DVS 150 accepts composite video on a single BNC, S-video on a 4-pin mini-DIN connector, and component video on three BNCs.
- **Pass-through input** – The DVS 150 offers a 15-pin HD pass-through input connector. The pass-through signal is available simultaneously on a 15-pin HD connector and six BNCs.
- **Scaled outputs** – Scaled output is available simultaneously as RGBHV on a 15-pin HD connector and RGsB, RGsB, or RGBHV on six BNCs. For computer-video, the DVS 150 features two refresh rates—60 Hz and 75 Hz—and these output rates: 640 x 480, 800 x 600, 832 x 624, 1024 x 768, and 1280 x 1024 (available at 60 Hz only). The DVS 150 features these HDTV rates: 480p, 720p, and 1080p. For plasma displays, the DVS 150 provides these plasma rates: 848 x 480, 852 x 480, 1280 x 768, and 1360 x 765.
- **Decoder** – The DVS 150 uses advanced decoder technology with a three-line adaptive comb filter, virtually eliminating chroma noise.
- **Picture controls** – The DVS 150 provides complete picture control over color, tint, contrast, brightness, horizontal shift, and vertical shift. Image settings are saved per input.
- **Advanced menu controls** – The DVS 150 provides the following features: autoswitch with higher-quality input having priority, sync on green output, top and bottom vertical blanking adjustments, and selection of horizontal and vertical sync polarities.
- **Vertical blanking** – Variable top and bottom vertical blanking eliminates edge noise caused by tapehead switching and captioning.
- **Detail level** – The user-adjustable detail level controls image sharpness.
- **Control** – The DVS 150 provides front panel buttons, contact closure, and RS-232 control. Extron's Simple Instruction Set™ is provided for RS-232 control via third-party control or Extron's Windows®-based control program.
- **Executive mode** – Executive mode prevents accidental changes by locking out all front panel functions except for input selection.
- **Power supply** – The DVS 150 includes a 100-240VAC, 50/60 Hz, auto-switchable internal power supply.

# SPECIFICATIONS

<b>Video input</b>	
Number/type .....	1 composite video, 1 S-video, 1 component video (R-Y, B-Y, Y); 1 RGB pass-through (DVS 150 only)
Connectors .....	3 BNC female ..... component video 1 4-pin mini DIN female .... S-video 1 BNC female ..... composite video 1 15-pin HD female ..... RGB pass-through
Nominal level(s) .....	Analog — 0.7V to 1.0V p-p
Impedance .....	75 ohms
Vertical frequency .....	50 Hz to 60 Hz
<b>Video output</b>	
Number/type/format .....	1 scaled RGBHV, RGsB, RGsB 1 scaled VGA RGBHV
Connectors .....	6 BNC female ..... RGB output 1 15-pin HD female ..... RGBHV output
Nominal level .....	0.7V p-p
Impedance .....	75 ohms
Vertical frequency .....	56 Hz, 60 Hz, or 75 Hz
Scaled VGA resolution .....	640x480, 800x600, 832x624, 840x480, 852x480, 1024x768, 1280x768, 1280x1024, 1360x765, HDTV 480p, 720p, and 1080p
<b>Sync</b>	
Output type .....	RGBHV, RGsB, RGsB
Standards .....	NTSC 3.58, NTSC 4.43, PAL, SECAM
Output level .....	TTL — 5.0V p-p
Output impedance .....	75 ohms
Polarity .....	Positive or negative (switch-selectable)
<b>Control/Remote</b>	
Serial control port .....	RS-232, 9-pin female D connector
Baud rate and protocol .....	9600, 8-bit, 1 stop bit, no parity
Contact closure .....	9-pin female D connector
<b>General</b>	
Power .....	100VAC to 240VAC, 50/60 Hz, 30 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 .....	Yes, with optional rack shelf, part #60-190-01
Enclosure type .....	Metal
Enclosure dimensions .....	1.75" H x 8.75" W x 9.50" D 4.45 cm H x 22.22 cm W x 24.13 cm D
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
Part number .....	60-317-01

## APPLICATION DIAGRAM



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