Extron Electronics
INTERFACING, SWITCHING AND DISTRIBUTION

DVS 100 - DIGITAL VIDEO SCALER

- Up scales to native resolutions
- Compatible with NTSC/PAL/SECAM
- Composite video, S-video, and component video inputs
- Scalable computer-video, HDTV, and plasma outputs
- Variable top and bottom vertical blanking
- Decoder with three-line adaptive comb filter
- Color, tint, contrast, and brightness controls
- Horizontal and vertical shift controls
- Detail level control
- RS-232 control
APPLICATIONS

Using advanced digital video scaling technologies, Extron's DVS 100 turns standard NTSC/PAL/SECAM video signals into stunning high-resolution video with enhanced depth for integration with digital display devices such as LCD, DLP, and plasma displays. To optimize image quality on digital display devices as well as maintain maximum image brightness and detail, lower-resolution NTSC/PAL/SECAM video resolutions need to be scaled up to RGB resolutions that match the “sweet spot” or native resolution of digital display devices. The DVS 100 accepts composite video, S-video, or component video inputs and offers a wide variety of RGB resolution output rates to match different computer-video, progressive HDTV, and plasma resolutions.

The rack-mountable DVS 100 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 output is available simultaneously on a 15-pin HD connector and six BNCs. The DVS 100 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 timelapse of displays from Fujitsu, NEC, Pioneer, and others, the DVS 100 provides these plasma output rates: 848 x 480, 852 x 480, 1280 x 768, and 1360 x 768.

FEATURES

**Inputs** - The DVS 100 provides these NTSC 3.58, NTSC 4.43, PAL, and SECAM inputs: composite video on a single BNC, S-video on a 4-pin mini-DIN connector, and component video on three BNCs.

**Outputs** - Scaled output is available simultaneously as RGBHV on a 15-pin HD connector and RGB, RGBS, or RGBHV on six BNCs. For computer-video, the DVS 100 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 100 features these HDTV rates: 480p, 720p, and 1080p. For plasma displays, the DVS 100 provides these plasma rates: 848 x 480, 852 x 480, 1280 x 768, and 1360 x 768.

**Decoder** - The DVS 100 uses advanced decoder technology with a three-line adaptive comb filter, virtually eliminating chroma noise.

**Picture controls** - The DVS 100 features these picture controls: color, tint, contrast, brightness, horizontal shift, and vertical shift. Image settings are saved per input.

**Advanced menu controls** - The DVS 100 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.

**Detail level** - The user-adjustable detail level controls image sharpness.

**Control** - The DVS 100 provides front panel buttons, contact closure, and RS-232 control. Extron's Simple Instruction Set™ is available for RS-232 control with third-party control or Windows®-based control program.

**LCD panel** - Provides settings and menu choices.

**Executive mode** - The DVS 100 features a reduced function mode that locks out all front panel functions except for input selection; all functions, however, remain active through RS-232.

**Power supply** - The DVS 100 includes a 100-240VAC, 50/60 Hz, auto-switchable internal power supply.

SPECIFICATIONS

**Video input**
- Number/type: 1 component video (Y, R-Y, B-Y), 1 S-video, 1 composite video
- Connectors: 3 BNC female... component video
- Nominal level(s): Analog — 0.7V to 1.0V p-p
- Impedance: 75 ohms
- Vertical frequency: 50 Hz & 60 Hz

**Video output**
- Number/format: 1 scaled RGBHV, RGBS, RGBd
- Connectors: 6 BNC female RGB output
- Nominal level: 0.7V p-p
- Impedance: 75 ohms
- Scaled VGA resolution: 640 x 480, 800 x 600, 832 x 624, 848 x 480, 852 x 480, 1024 x 768, 1280 x 768, 1280 x 1024, 1360 x 768, HDTV 480p, 720p and 1080p

**Sync**
- Output type: RGBHV, RGBS, RGBd
- 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)

**Control/Remote**
- Serial port: Extron's Windows® control program
- Program control: Extron's Simple Instruction Set™

**General**
- Power: 100VAC to 240VAC, 50/60Hz, 30 Watts, internal, auto-switchable
- Temperature/humidity: Storage -40° to +158°F (-40° to +70°C) / 10% to 90%, non-condensing
- Rack mount: Yes, with optional rack shelf, part #60-190-01
- Enclosure type: Metal
- Enclosure dimensions: 4.45 cm H x 22.22 cm W x 24.13 cm D
- Shipping weight: 5 lbs (2.3 kg)
- Vibration: NSTA 1A in carton (National Safe Transit Association)
- Approvals: UL, CUL, CE, FCC Class A & B
- MTBF: 30,000 hours
- Warranty: 2 years parts and labor
- Part Number: DVS 100 — 60-304-01

**Applications**

APPLICATION DIAGRAM

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