

## **VP-794**

8-Input Universal Live Event Scaler/Switcher/Blend & Warp for Projection & LED Videowalls



The VP-794 is a high-performance switcher/scaler/edge-blend & warp for analog and digital video signals developed specifically for driving large screen displays and multiple screen applications from video or graphics sources. It up- or down-scales the incoming signal, processes the image with HQV and flexible warping, geometry correction and professional grade edge blending and outputs the signal to 3G HD-SDI, DVI/HDMI, VGA and S/PDIF connectors. VP-794 includes a special mode for driving LED video walls with pixel-accurate output image sizing.

## **FEATURES**

- Optimized Operating Modes For LED video walls, or soft edge-blend and warp for projection, or scan conversion/scaling for general purpose scaler/switcher use.
- Multi-Format Operation 3G HD-SDI, HDMI, DVI, computer graphics, component, composite and s-Video inputs for signals up 1080p & WUXGA.
- Full Warp Mapping Easy warp map creation for stacked projector alignment and curved screen multi-projector tiling via an included PC application.
- Powerful Geometry Correction For off-axis projection, pin/barrel and image rotation, pan, tilt and zoom.
- Edge Blending 4-sided professional grade edge blend with 48-bit processing, degamma & multi-region black level correction.
- HQV® Video Processing HQV (Hollywood Quality Video) processing represents the state-of-the-art in video processing technology, with the highest quality de-interlacing (with 3:2 & 2:2 pull down), 4D motion adaptive SD noise reduction and outstanding scaling performance for both standard-definition and high-definition signals.
- HDTV Compatible.
- HDCP Compliant.
- Supported Resolutions HD 720p, 1080i, 1080psf (psf digital only), 1080p23.97/24/25/30, 1080p30, 1080p50, 1080p59.94, 1080p60; ED 480p, 576p (not via SDI); SD 625i (576i), 525i (480i); common VESA graphics formats from 640x480 to 1920x1200 (with reduced blanking for 1920x1200 and 1600x1200 modes).
- Genlock (V-Lock) Accepts bi-level, tri-level sync or black & burst.
- Selectable Lock Modes Genlock (V-Lock), I/O lock or frame rate conversion.
- HDMI Support Deep color up to 12 bit.
- Multi-Standard Support For CVBS & YC in PAL, NTSC, SECAM formats with selectable 3D comb for composite.
- Superior De-interlacing Motion adaptive per pixel video de-interlacing with multi-directional diagonal de-interlace filter reduces HD & SD image flicker and artifacts.
- Live Image Capture Logo/still/backdrop capture with full scale warp/blend of the captured image, 4 memories.
- Selectable Processing Versus Latency Best picture and low latency modes; latency as low as 0.25-frame progressive inputs, 1.25-field interlaced inputs.
- Selectable Aspect Ratio Conversion Or incoming aspect ratio preserve mode.
- Built-in Time Base Corrector Stabilizes unstable video sources.
- Flexible Colour Calibration Controls RGB Gains, RGB Cut-Off/Black Level, Saturation, Hue, Brightness, Contrast

controls, Gamma selection with separate calibration memories per input channel.

- Audio De-embedding From HDMI & 3G HS-SDI to S/PDIF compatible formats.
- Built-in Test Pattern Generator.
- USB Port For upgrading firmware.
- Non-Volatile Memory Auto-saves and recalls settings.
- Flexible Control Options Front panel buttons, jog wheel and LCD menu display, RS-232, TCP/IP API and Web Server, PC-based Warp Map Generator tool.
- Setting Backup Save complete system config to disk via Web browser interface to clone or restore units.
- Front Panel Lockout.
- Picture In Picture In LED and scaler modes with flexible pixel-accurate PIP sizing.
- Worldwide Power Supply 100-240V AC.

INPUTS: 2 composite video on BNC and RCA connectors,

1 YC/s-Video on a 4-pin connector,

1 component video YPbPr(S) or RGsB/RGBS on 3/4 BNC connectors,

1 HDMI connector, 1 DVI with HDCP,

1 VGA on a 15-pin HD connector,

1 SD/HD/3G HD-SDI on a BNC connector,

1 genlock (V-Lock) accepts bi-level, tri-level sync or black & burst, 50/59.94/60Hz formats

on a BNC connector.

OUTPUT: 1 SD/HD/3G HD-SDI on a BNC connector, 1 DVI/HDMI on a DVI connector, 1 VGA on a

15-pin HD connector, 1 S/PDIF on an RCA connector.

OUTPUT RESOLUTIONS: DVI/VGA common VESA formats 640x480 to 1920x1200, 720p, 1080p; 3G HD-SDI in SMPTE

formats 480i, 576i, 720p, 1080i, 1080p with selectable audio embed.

OPERATING MODES: LED video wall, projection, scaler/switcher/scan converter.

MINIMUM LED VIDEOWALL 128X96 pixels.

SIZE

PROJECTION MODE WARP Full Warp Mapping, 4-Corner, Rotate, Pin/Barrel, Portrait, Keystone.

APPS:

PROJECTION MODE EDGE 48-bit per pixel, 4:4:4 16-bit per color edge blend with de-gamma processing and

BLENDING: multi-region black level correction.

LATENCY: As low as 0.25-frame progressive inputs, 1.25-fields interlaced inputs.

SIGNAL PROCESSING: 10-bit signal inputs, 12-bit accurate internal processing; 4-field full resolution SD & HD

processing.

DE-INTERLACING: Motion adaptive per pixel video de-interlacing, multi-directional diagonal de-interlace filter.

POWER SOURCE: 100-264V AC, 35W typical. OPERATING  $0^{\circ}$  to  $+40^{\circ}$ C (32° to  $104^{\circ}$ F).

TEMPERATURE:

STORAGE TEMPERATURE:  $-30^{\circ}$  to  $+70^{\circ}$ C ( $-22^{\circ}$  to  $158^{\circ}$ F).

HUMIDITY: 10% to 90%, RHL non-condensing.

DIMENSIONS: 19" x 7.2" x 1U W, D, H, rack mountable.

WEIGHT: 2.5kg (5.5lb).

INCLUDED ACCESSORIES: DVI-D cable, user manual/CD, power cord.