

# **VP-794**

8-Input Universal Live Event Scaler/Switcher/Warp & Blend for Projection & LED Videowalls | VGA/UXGA - 15-pin HD | DVI | HDMI | 3G HD-SDI - BNC | Ethernet - RJ-45 | HDCP Compliant



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

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)

LED Videowall Mode - Superb video down-scaling to as low as 128x96 pixels

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 Color 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



# TECHNICAL SPECIFICATIONS

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

RESOLUTIONS: 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 SIZE:** 

128X96 pixels

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

WARP APPS:

SIGNAL

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

multi-region black level correction

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

PROCESSING: & HD processing

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

10-bit signal inputs, 12-bit accurate internal processing; 4-field full resolution SD

de-interlace filter

POWER SOURCE: 100-264V AC, 35W typical

**OPERATING** TEMPERATURE: 0° to +40°C (32° to 104°F)

**STORAGE** 

TEMPERATURE:

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

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

**INCLUDED** 

DVI-D cable, user manual/CD, power cord

ACCESSORIES:

**Product Dimension** 19" x 7.24 x 1U (43.6cm x 18.40cm x 8.80cm) W, D, H

**Product Weight** 1.8kg (4.1lbs) approx

0.00cm x 0.00cm x 0.00cm (0.00" x 0.00" x 0.00") W, D, H Shipping Dimension

Shipping Weight 2.5kg (5.5lbs) approx

