



VP-460

3-Input Analog & 3G HD-SDI ProScale™ Presentation Switcher/Scaler



The **VP-460** is a high-quality presentation switcher and scaler with PIP for computer graphics, composite video and 3G HD-SDI signals. It scales the video, embeds the audio and outputs the signal to the HDMI and SDI outputs together with a digital audio output.

FEATURES

- **K-IIT XL™ Picture-in-Picture Image Insertion Technology** - Ultra-stable picture-in-picture, picture-and-picture, and split screen capability. Any video source can be inserted into or positioned next to an SDI video source or vice versa with window positioning and sizing controls.
- **Kramer's PixPerfect™ Scaling Technology** - Kramer's precision pixel mapping and high quality scaling technology. High-quality 3:2 and 2:2 pull down de-interlacing and full up and down-scaling of all video input signals.
- **Ultra-Fast Fade-Thru-Black (FTB™) Switching** - Video switching transitions are clean and ultra fast. The video fades to black and the new input fades from black for smooth, glitch-free switching. The output signal provides constant sync so the display never glitches.
- **HDTV Compatible.**
- **Multi-Standard Operation** - SDI (SMPTE 259M), HD-SDI (SMPTE 292M) and 3G HD-SDI (SMPTE 424M).
- **Video Inputs** - 1 computer graphics on a 15-pin HD connector, 1 composite video on an RCA connector, 1 SD/HD/3G HD-SDI with loop on BNC connectors.
- **Scaled Outputs** - 1 HDMI, 1 SD/HD/3G HD-SDI on a BNC connector.
- **40 Output Resolutions** - Up to WUXGA, 1080p and 2K.
- **HDMI Deep Color Support** - For inputs and outputs.
- **Luma Keying** - Via PIP window.
- **Vertical Keystoning.**
- **Built-in ProcAmp** - Color, sharpness, contrast, brightness and gamma are set individually for each input.
- **3D Comb Filtering** - Provides the best quality color separation for composite video inputs.
- **Built-in Time Base Corrector** - Stabilizes unstable video sources.
- **Powerful Noise Reduction Filters** - Temporal, block, mosquito and combing.
- **Picture Zooming** - From 100% to 1600% on both main and PIP picture.
- **De-interlacing** - 3:2 and 2:2 pull-down; 24sf handling.
- **Multiple Aspect Ratio Selections** - Follow input, follow output, best fit, letterbox and overscan.
- **Dual Window Display** - Preset picture-in-picture, picture-and-picture and split screens, as well as customized window layouts.
- **Audio Inputs** - 1 computer graphics on a 3.5mm mini-jack connector, 1 CV on RCA connectors; embedded audio (user selectable) on the SDI input.
- **Audio Outputs** - 1 S/PDIF on an RCA connector, embedded audio on the HDMI and SDI outputs.
- **Power Save Modes** - Options for efficient energy use.

- Advanced EDID Management - For each input and each output.
- Non-Volatile Memory - Saves final settings.
- Firmware Upgrades - Via RS-232.
- Flexible Control Options - Front panel buttons, OSD (on-screen display) via front panel buttons or IR remote (remote control included); control application software for use via RS-232.
- Desktop Size - Compact size. 2 units can be rack mounted side-by-side in a 1U rack space with an optional RK-1 adapter.

TECHNICAL SPECIFICATIONS

INPUTS:	1 computer graphics on a 15-pin HD connector, 1 composite video, 1Vpp @75Ω on an RCA connector, 1 SD/HD/3G HD-SDI on a BNC connector, 1 unbalanced stereo audio on a 3.5mm mini jack connector, 1 unbalanced stereo audio on 2 RCA connectors.
OUTPUTS:	1 SD/HD/3G HD-SDI on a BNC connector, 1 HDMI (deep color) connector, 1 S/PDIF digital audio on an RCA connector.
COMPLIANCE WITH HDMI STANDARD:	Supports HDMI Deep Color.
OUTPUT RESOLUTIONS:	640x480@60, 640x480@75, 800x600@50, 800x600@60, 800x600@75, 1024x768@50, 1024x768@60, 1024x768@75, 1280x768@50, 1280x768@60, 1280x800@60, 1280x1024@50, 1280x1024@60, 1280x1024@75, 1360x768@60, 1366x768@50, 1366x768@60, 1400x1050@50, 1400x1050@60, 1600x900@60, 1600x1200@50, 1600x1200@60, 1680x1050@60, 1920x1200@60, 480i60, 480p60, 576i50, 576p50, 720p50, 720p59.94, 720p60, 1080p23.976, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60, 2K50, 2K60.
CONTROLS:	Front panel buttons, OSD, IR remote control, RS-232 on a 9-pin D-sub connector.
POWER CONSUMPTION:	5V DC, 2.90A.
OPERATING TEMPERATURE:	0° to +40°C (32° to 104°F).
STORAGE TEMPERATURE:	-40° to +70°C (-40° to 158°F).
HUMIDITY:	10% to 90%, RHL non-condensing.
DIMENSIONS:	21.5cm x 16.3cm x 4.4cm (8.5" x 6.4" x 1.7") W, D, H.
WEIGHT:	0.9kg (1.98lbs) approx.
INCLUDED ACCESSORIES:	Power supply, IR remote control.
OPTIONS:	RK-1 rack adapter.

