The VP−770 is a high−performance presentation switcher and scaler for composite video, component video, DisplayPort, computer graphics video, and HDMI signals. It scales the video, embeds the audio and outputs the signal to HDMI, computer graphics and DGKat twisted pair, together with digital audio, unbalanced stereo and a 10−watt amplified balanced stereo speaker 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 any other video source with full window positioning and sizing controls.

**PixPerfect™ Scaling Technology** - 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.

**Advanced EDID Management** - For each input and analysis of the EDID of a selectable master connection to one of the outputs.

**Mass Notification Emergency Communication System (MNEC)** - Activates a national or campus−wide notification, immediately displayed when an emergency situation develops. It uses automatic text overlaying, either via a crawler or a full screen cover up, as well as an optional audio alert.

**DGKat™ Signal Integration** - Kramer's unique technology for converting TMDS as well as control and communication to signals that run over twisted pair cables.

**System Range** - Up to 90m (295ft) @ 1080i @ 60hz or up to 70m (230ft) @ 1080p @ 60hz when using Kramer DGKat cables. Note: Transmission range depends on the signal resolution, graphics card and display used. If using third–party shielded CAT cables, both ends of the shield must be soldered to the connectors for the products to function properly.

**HDTV Compatible**

**HDCP Compliant** - The HDCP (High Definition Content Protection) license agreement allows copy−protected data on the HDMI input to pass only to the HDMI output.

**Video Inputs** - Component (Y, Pb, Pr) video on RCA connectors, DisplayPort (DP), 2 computer graphics on 15−pin HD connectors, 2 composite video on RCA connectors and 2 HDMI.

**Scaled Outputs** - HDMI, computer graphics on a 15−pin HD connector and DGKat twisted pair on an RJ−45 connector simultaneously.

**Multiple Output Resolutions** - Up to 2K and 1080p.

**HDMI Deep Color Support**

**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** - Up to 1600% both on 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** - 2 HDMI, 2 computer graphics and 1 DisplayPort and 1 microphone in on 3.5mm mini jacks; 2 CV and 1 S/PDIF on RCA connectors.

**Audio Outputs** - 1 S/PDIF on an RCA connector, 1 unbalanced stereo audio on a 3−pin terminal block connector and a 2x10W built−in power amplifier with speaker outputs on terminal block connectors.
Input and Output Audio Level Adjustment

**Audio Delay** - For lip-sync correction

**Selectable Power Saving Modes** - For efficient energy usage

**Microphone Input** - Supports mix and talk-over features, as well as delay to prevent feedback

**Non-Volatile Memory** - Saves final settings

**Firmware Upgrades** - Via Ethernet and RS-232

**Flexible Control Options** - Front panel buttons, contact closure, OSD (on-screen display) via front panel buttons or IR remote (remote control included)

**Worldwide Power Supply** - 100–240V AC
**TECHNICAL SPECIFICATIONS**

**INPUTS:**
- 2 HDMI (deep color) connectors,
- 2 VGA on 15-pin HD connectors,
- 1 component video on 3 RCA connectors,
- 2 composite video on RCA connectors,
- 1 DisplayPort connector,
- 2 HDMI, 2 VGA, 1 DP, 2 CV unbalanced stereo audio on 3.5mm mini jack connectors,
- 1 S/PDIF (for component video input) digital audio on an RCA connector,
- 1 mic on a 3.5mm mini jack connector

**OUTPUTS:**
- 1 VGA on a 15-pin HD connector,
- 1 HDMI (deep color) connector,
- 1 DGKat on an RJ-45 connector,
- 1 S/PDIF digital audio on an RCA connector,
- 1 unbalanced stereo audio on a 3-pin terminal block connector,
- 12x10W speaker amplifier balanced stereo audio on terminal block connectors

**COMPLIANCE WITH HDMI STANDARD:**
Supports HDMI (deep color) and HDCP, Supports: DisplayPort 1.1a

**OUTPUT RESOLUTIONS:**
- 640x480@60, 640x480@75, 800x600@50, 800x600@60, 800x600@75, 1024x768@50, 1024x768@60, 1024x768@75, 1280x768@50, 1280x768@60, 1280x768@75, 1360x768@60, 1366x768@50, 1366x768@60, 1366x768@75, 1400x1050@50, 1400x1050@60, 1600x900@60, 1600x1200@50, 1600x1200@60, 1680x1050@60, 1920x1200@60, 1920x1200@50, 1920x1200@60
- 2048x1080@60Hz, 2048x1080@50Hz

**CONTROLS:**
Front panel buttons, OSD, IR remote control, RS-232 on a 9-pin D-sub connector, Ethernet, contact closure

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

**STORAGE TEMPERATURE:**
- -40° to +70°C (~-49° to 158°F)

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

**POWER SOURCE:**
100-240V AC, 56VA max

**INCLUDED ACCESSORIES:**
Power cord, rack "ears", IR remote control

**Product Dimensions**
19" x 9.34 x 1U (43.6cm x 23.72cm x 4.36cm) W, D, H

**Product Weight**
2.5kg (5.5lbs) approx

**Shipping Dimensions**
52.50cm x 33.00cm x 10.70cm (20.67" x 12.99" x 4.21") W, D, H

**Shipping Weight**
3.6kg (7.9lbs) approx