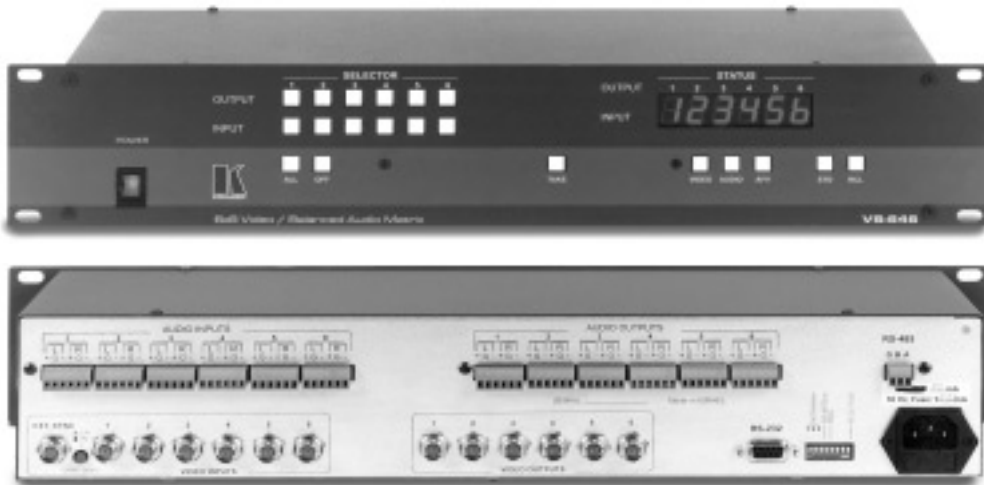




# 6x6 Balanced Video Audio Matrix Switcher VS-646

The Kramer VS-646 is a high performance, 6x6 vertical interval matrix switcher for composite video and balanced audio stereo signals. It is a true matrix, allowing the user to route any input to any or all outputs simultaneously. Since the VS-646 switches during the vertical interval, transitions are glitch-free when sources share a common reference sync. There are many updated features on this popular design including audio breakaway, which provides the ability to switch audio independently from video. Six preset memory locations are provided for quick access to common

configurations. Also, the TAKE button allows the user to place multiple switches in a queue, then activate them with one touch of this button. Kramer's new control software is included for applications where a Windows™ based PC is used to control the VS-646. There are a total of three ways to control the VS-646: front-panel buttons, RS-232, and RS-485. It is dependable, rugged, and fits in two vertical spaces of a standard 19" rack. Video bandwidth of 200MHz ensures that the VS-646 remains transparent even in the most critical applications.



## TECHNICAL SPECIFICATIONS

<b>INPUTS:</b>	6 composite video, 1Vpp / 75 $\Omega$ on BNCs. 1 sync / video genlock 1Vpp / 75 $\Omega$ with sync select switch. 6 balanced audio stereo, + 4 dBm / 33 k $\Omega$ on detachable terminal blocks.
<b>OUTPUTS:</b>	6 composite video, 1Vpp / 75 $\Omega$ on BNCs. 6 balanced audio stereo, +4dBm / 50 $\Omega$ (24 Vpp max.) on detachable terminal blocks.
<b>VIDEO BANDWIDTH:</b>	200 MHz. -3dB.
<b>AUDIO BANDWIDTH:</b>	100 kHz. -3dB.
<b>VIDEO CROSSTALK:</b>	<-50 dB @ 5 MHz.
<b>AUDIO S/N:</b>	84 dB unweighted, (1Vpp).
<b>VIDEO S/N:</b>	74 dB.
<b>AUDIO THD:</b>	0.025% (1V, 1 kHz).
<b>NON LINEARITY:</b>	<0.1%.
<b>2nd HARMONIC:</b>	0.013%.
<b>DIFF. GAIN:</b>	0.05%.
<b>MAXIMAL AUDIO:</b>	24 Vpp (>20 dBm).
<b>DIFF. PHASE:</b>	0.03 Deg.
<b>K-FACTOR:</b>	<0.05%.
<b>CONTROL:</b>	Manual, RS-232 or RS-485.
<b>SWITCHING:</b>	Vertical interval.
<b>DIMENSIONS:</b>	19 inch (W), 7 inch (D) 2U (H) rack mountable.
<b>POWER SOURCE:</b>	230 VAC, 50/60 Hz, (115VAC, U.S.A.), 14 VA.
<b>WEIGHT:</b>	3.4 kg (7.5 lbs.) approx.
<b>ACCESSORIES:</b>	Power cord, Windows 95/98 control software, null modem adapter.

## TYPICAL APPLICATIONS

- Any professional system requiring outstanding value in a 6x6 matrix.
- Production and duplications facilities, rental and staging.
- Security, CCTV, and home theater systems.

WEB: [www.kramerelectronics.com](http://www.kramerelectronics.com)