



## Vertical Interval Video Audio Switchers VS-1211/1011/811/611/411

The Kramer VS-1211, VS-1011, VS-811, VS-611, and VS-411 are a family of high performance vertical interval switchers for composite video and balanced audio stereo signals. One of 12 sources can be routed to one monitor, VCR, or other receiving device. Since switching is performed during the vertical interval, transitions are glitch-free when sources share a common reference sync.

There are of four ways to control the VS-1211 family: front-panel buttons, RS-232, RS-485, and contact closure. They are also designed to be easily expandable for larger switching

systems. For example, two VS-1211's can be combined to form a 24x1, etc. Multiple units can also be operated in parallel for switching component signal formats. For example, two VS-1211's could be linked to switch YUV, etc. The VS-1211 family is dependable, rugged, and each fits in one vertical space of a standard 19" rack. Video bandwidth of at least 250MHz ensures that they remain transparent even in the most critical production, presentation, or broadcast applications.



### TECHNICAL SPECIFICATIONS

<b>INPUTS:</b>	12, 10, 8, 6, 4 composite / single component video, 1Vpp / 75 $\Omega$ , on BNCs. 12, 10, 8, 6, 4 audio - balanced stereo, +4dBm, 10k $\Omega$ , on 2-part, snap fit terminal blocks. 1 external sync input (or composite video) 1Vpp / 75 $\Omega$ , on a BNC connector. RS-232 DB-9 control socket, RS-485 terminal block, DB-15 for remote connector.
<b>OUTPUTS:</b>	1 composite / single component video, 1Vpp / 75 $\Omega$ on a BNC. 1 audio - balanced stereo up to +28Vpp / 50 $\Omega$ , (24dBm) on terminal blocks.
<b>BANDWIDTH (VIDEO):</b>	250 MHz, -3dB.
<b>BANDWIDTH (AUDIO):</b>	55 kHz, -0.1dB.
<b>NON LINEARITY:</b>	<0.1%.
<b>AUDIO THD+NOISE:</b>	0.013%.
<b>DIFF. PHASE:</b>	0.03 Deg.
<b>2nd HARMONIC:</b>	<0.003% (1kHz).
<b>DIFF. GAIN:</b>	0.04%
<b>AUDIO CROSSTALK:</b>	-79 dB.
<b>LUMA S/N:</b>	>77 dB.
<b>AUDIO S/N RATIO:</b>	> 95 dB, unweighted.
<b>K-FACTOR:</b>	<0.05%.
<b>CONTROL:</b>	12 illuminated front-panel touch switches, RS-232, RS-485 and contact closure.
<b>DIMENSIONS:</b>	19-inch (W), 7-inch (D) 1U (H) rack mountable.
<b>POWER SOURCE:</b>	230 VAC, 50/60 Hz, (115VAC U.S.A.) 16 VA (VS-1211).
<b>WEIGHT:</b>	3.1 kg (6.88 lbs.) approx.
<b>ACCESSORIES:</b>	Power cord, Windows 95/98 control software, null modem adapter.

### TYPICAL APPLICATIONS

- Video production studios and professional presentation systems.
- Live broadcast, for switching between cameras in real-time.
- CCTV and security applications.

VIDEO AND AUDIO SWITCHERS, MATRIX SWITCHERS AND CONTROLLERS