



KRAMER ELECTRONICS, LTD

GROUP 2

Balanced Audio Stereo Matrix Switchers

VS-1602xl/1202xl/1002xl

The Kramer VS-1602xl/1202xl/1002xl are high performance, 16/12/10x2 vertical interval matrix switchers for composite video and balanced audio stereo signals. They are true matrix switchers, allowing the user to route any input to any or all outputs simultaneously. Since the machines switch during the vertical interval, transitions are glitch-free when sources share a common reference sync. There are many new features in these popular designs including audio breakaway, which provides the ability to switch audio independently from video. In addition, the TAKE button allows the user to place multiple switches in a queue,

and then activate them with one touch of this button or a single serial command. Kramer's new control software is included for applications where a Windows™ based PC is used to control the VS-1602xl/1202xl/1002xl. There are three ways to control these matrix switchers: front-panel buttons, RS-232, and RS-485. The matrix switchers are dependable, rugged, and fit in two vertical spaces of a standard 19" rack (2U). Video bandwidth of 200MHz ensures that the matrix switchers remain transparent even in the most critical applications.



TECHNICAL SPECIFICATIONS

INPUTS:	16/12/10 composite video, 1Vpp / 75 Ω on BNCs. 16/12/10 balanced (or unbalanced) audio stereo, +4dBm / 47k Ω on detachable terminal blocks.
OUTPUTS:	2 composite video, 1Vpp / 75 Ω on BNCs. 2 balanced (or unbalanced) audio stereo, +4dBm / 50 Ω (20 Vpp max.) on detachable terminal blocks.
VIDEO BANDWIDTH:	200 MHz. -3 dB.
VIDEO CROSSTALK:	<60 dB @ 5 MHz.
NON LINEARITY:	<0.05%.
VIDEO S/N:	73 dB.
DIFF. GAIN:	<0.04%.
DIFF. PHASE:	<0.04 Deg.
K-FACTOR:	<0.05%.
AUDIO BANDWIDTH:	100 kHz. -3 dB.
AUDIO S/N:	82 dB unweighted, (1Vpp).
AUDIO THD:	0.021% (1V, 1KHz.).
2 nd HARMONIC:	0.004%.
CONTROL:	Manual, RS-232 or RS-485.
SWITCHING:	Vertical interval.
DIMENSIONS:	19-inch (W), 7-inch (D) 2U (H) rack mountable.
POWER SOURCE:	230 VAC, 50/60 Hz, (115VAC, U.S.A.) 10VA.
WEIGHT:	3.4 kg. (7.5 lbs.) approx.
ACCESSORIES:	Power cord, Windows 95/98 control software, null modem adapter.

TYPICAL APPLICATIONS

- Any professional system requiring outstanding value in a 16x2, 12x2 or 10x2 matrix switchers
- Security, CCTV, and home theater systems.
- Production and duplications facilities, rental and staging.