



VS-1616D

2x2 to 16x16 Modular Multi-Format Digital Matrix Switcher



The VS-1616D is a high-performance matrix switcher chassis for DVI & HDMI signals. The unit is modular and populated from 2x2 to 16x16 in increments of two inputs and/or two outputs. The chassis includes a power supply, control module and a test module that can monitor and test any input and output in the matrix.

FEATURES

- **Kramer Core™ - FLEXIBLE INFRASTRUCTURE CONVERSION!** Copper, Fiber or Twisted Pair – all can be used at the same time, according to input/output module selection. The matrix receives digital signals from compatible Kramer transmitters, automatically converts between available infrastructure options and sends the signals to compatible Kramer receivers. Kramer Core™ solution is the ultimate in versatility!
- **Max. Data Rate - 9.6Gbps (3.2Gbps per graphic channel)** depending on the cards used.
- **HDTV Compatible.**
- **HDCP Compliant** - With DVI (HDCP) and HDMI modules.
- **HDMI Support** - HDMI Compressed Audio Channels.
- **DGKat™ Signal Integration** - Kramer's unique technology for converting TMDS as well as control and communication to signals that run over twisted pair cables. We strongly recommend using Kramer DGKat™ cables designed specifically for optimum performance.
- **Kramer Equalization & re-Klocking™ Technology** - Rebuilds the digital signal to travel longer distances.
- **Fast Switching** - On outputs to reduce or remove switching delay.
- **Modular & Easily Configurable Platform** - Input or output module types can be mixed and added in increments of 2 from 2x2 up to 16x16.
- **Available Modules** - DVI, DVI (HDCP), DVI (dual link), HDMI, LC optical & DGKat twisted pair.
- **Protocol 3000 Support.**
- **Default EDID** - For each input.
- **EDID Capture** - Copies and stores the EDID from a display device.
- **EDID PassThru** - Passes EDID/HDCP signals from source to display.
- **Take Button** - Executes multiple switches all at once.

- Memory Locations - Stores multiple switches as presets to be recalled and executed as needed.
- Test Pattern Module - With 4 output resolutions for troubleshooting video problems.
- Front Panel Lockout.
- Flexible Control Options - Front panel, IR remote, RS-232, Ethernet, K-Router Plus™ software application.
- Worldwide Power Supply - 100–240V AC.
- Standard 19" Rack Mount Size - 4U. Rack "ears" included.

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TECHNICAL SPECIFICATIONS

INPUTS:	2 to 16 (in increments of 2) of the following inputs: DVI or HDCP, 1.2Vpp on DVI Molex 24-pin (F) connectors; DDC signal 5Vpp (TTL); HDMI; fiber optic on LC connectors; DGKat on RJ-45 connectors; 1 to 8 (in increments of 1) DVI dual link, 1.2Vpp on DVI Molex 24-pin (F) connectors.
OUTPUTS:	2 to 16 (in increments of 2) of the following outputs: DVI or HDCP, 1.2Vpp on DVI Molex 24-pin (F) connectors; DDC signal 5Vpp (TTL); HDMI; fiber optic on LC connectors; DGKat on RJ-45 connectors; 1 to 8 (in increments of 1) DVI dual link, 1.2Vpp on DVI Molex 24-pin (F) connectors.
MAX. DATA RATE:	9.6Gbps (3.2Gbps per graphic channel) depending on the cards used.
MAX RESOLUTION:	Up to UXGA; 1080p, 1920x1200.
CONTROLS:	Front panel buttons, infrared remote control transmitter, RS-232, Ethernet.
SWITCHING:	Confirm or At Once for immediate switching.
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.
POWER CONSUMPTION:	100–240V AC, 50/60Hz, 135VA.
DIMENSIONS:	19" x 14.2" x 4U (W, D, H) rack-mountable.
WEIGHT:	8.1kg (17.9lbs) approx.
INCLUDED ACCESSORIES:	Power cord, infrared remote control transmitter.

CONFIGURATIONS

Input Modules

DVI-IN2-F16	2-Input DVI Card (F-16)
HDCP-IN2-F16	2-Input DVI (HDCP) Card (F-16)
DL-IN1-F16	1-Input DVI Dual Link Card (F-16)
F610-IN2-F16	2-Input DVI over 4LC Fiber Card (F-16)
H-IN2-F16	2-Input HDMI Card (F-16)
DGKat-IN2-F16	2-Input HDMI & RS-232 over DGKat Card (F-16)
HDBT-IN2-F16	2-Input HDMI over HDBaseT Card (F-16)
F670-IN2-F16	2-Input HDMI over OM3 Fiber Card (F-16)
HAA-IN2-F-16	2-Input HDMI with Analog Audio Card (F-16)
HAD-IN2-F16	2-Input HDMI with Digital Audio Card (F-16)
VGA-IN2-F16	2-Input VGA Card (F-16)
Module Plate	
BLP-F16	Blank Cover Plate for Empty Module Slots

Output Modules

DVI-OUT2-F16	2-Output DVI Card (F-16)
HDCP-OUT2-F16	2-Output DVI (HDCP) Card (F-16)
DL-OUT1-F16	1-Output DVI Dual Link Card (F-16)
F610-OUT2-F16	2-Output DVI over 4LC Fiber Card (F-16)
H-OUT2-F16	2-Output HDMI Card (F-16)
DGKat-OUT2-F16	2-Output HDMI & RS-232 Input over DGKat Card (F-16)
HDBT-OUT2-F16	2-Output HDMI over HDBaseT Card (F-16)
F670-OUT2-F16	2-Output HDMI over OM3 Fiber Card (F-16)
HAA-OUT2-F-16	2-Output HDMI with Analog Audio Card (F-16)
HAD-OUT2-F16	2-Output HDMI with Digital Audio Card (F-16)