VS-1616D

2x2 to 16x16 Modular MultiFormat Digital
Matrix Switcher

| VGA/UXGA - 15-pin HD | DVI | HDMI
| Ethernet - RJ-45 | HDCP Compliant | DGKat
| Kramer Core | HDBaseT | 4K/60 UHD (4:2:0)

The VS1616D is a highperformance matrix switcher chassis for AV 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 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 - 10.2Gbps (3.4Gbps per graphic channel) when using compatible cards

HDTV Compatible

HDCP Compliant - With DVI (HDCP), HDMI, F670, HDBaseT, HDMI with audio and DGKat modules

HDMI Support

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 & reKlocking™ Technology - Rebuilds the digital signal to travel longer distances

Optional Fast Switching Support - For fraction of a second switching

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, HDMI, HDCP (HDMI over DVI connector), Dual Link DVI, HDMI over Fiber, DVI over Fiber, HDBaseT, HDBaseT Lite, HDMI with analog audio interface, HDMI with digital audio interface, VGA and DGKat (HDMI over twisted pair)

Protocol 3000 Support

Flexible Configuration - To disable HDCP support and convert between HDMI and DVI

Default EDID - For each input

EDID Capture - Copies and stores the EDID from a display device

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 and additional monitor port with audio embedding and deembedding

Front Panel Lockout

Flexible Control Options - Front panel, IR remote, RS232, Ethernet, KRouter Plus™ software application

Worldwide Power Supply - 100240V AC

Standard 19" Rack Mount Size - 4U. Rack "ears" included

TECHNICAL SPECIFICATIONS

INPUTS:	2 to 16 (in increments of 2) of the following inputs: DVI or HDCP, 1.2Vpp on DVI Molex 24pin (F) connectors; DDC signal 5Vpp (TTL); HDMI; fiber optic on LC connectors; DGKat on RJ45 connectors; 1 to 8 (in increments of 1) DVI dual link, 1.2Vpp on DVI Molex 24pin (F) connectors
OUTPUTS:	2 to 16 (in increments of 2) of the following outputs: DVI or HDCP, 1.2Vpp on DVI Molex 24pin (F) connectors; DDC signal 5Vpp (TTL); HDMI; fiber optic on LC connectors; DGKat on RJ45 connectors; 1 to 8 (in increments of 1) DVI dual link, 1.2Vpp on DVI Molex 24pin (F) connectors
MAX. DATA RATE:	10.2Gbps (3.4Gbps per graphic channel) depending on the cards used
MAX RESOLUTION:	Up to 4K @60Hz (4:2:0)
CONTROLS:	Front panel buttons, infrared remote control transmitter, RS232, 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 noncondensing
POWER CONSUMPTION:	100240V AC, 50/60Hz, 135VA
PRODUCT DIMENSION:	19" x 14.57 x 4U (43.6cm x 37.00cm 18.00cm) W, D, H
PRODUCT WEIGHT:	7.5kg (16.4lbs) approx
SHIPPING DIMENSION:	57.00cm x 48.00cm x 28.00cm (22.44" x 18.90" x 11.02") W, D, H
SHIPPING WEIGHT:	8.8kg (19.3lbs) approx
INCLUDED ACCESSORIES:	Power cord, infrared remote control transmitter

CONFIGURATIONS

VS-1616D	2x2 to 16x16 Modular MultiFormat Digital Matrix Switcher
VS-1616DT	2x2 to 16x16 Modular MultiFormat Digital Matrix Switcher - Required for some HDBaseT applications. For more information, see the Thermal Guidelines document under Resources or call your Kramer representative
AAD-IN2-F16	2-Input Analog & Digital Audio Card (F-16)
DGKat-IN2-F16	2-Input HDMI & RS-232 over DGKat Card (F-16)
DL-IN1-F16	1-Input DVI Dual Link Card (F-16)
DVI-IN2-F16	2-Input DVI Card (F-16)
F610-IN2-F16	2-Input DVI over 4LC Fiber Card (F-16)
F670-IN2-F16	2-Input HDMI over OM3 Fiber Card (F-16)
HH-IN2-F16	2-Input HDMI Card (F-16)
HAA-IN2-F16	2-Input HDMI with Analog Audio Card (F-16)
HAD-IN2-F16	2-Input HDMI with Digital Audio Card (F-16)
HDBT-IN2-F16	2-Input HDMI over HDBaseT Card (F-16). Range up to 130m (430ft) at 2K
HDBT7-IN2-F16	2-Input 4K HDMI over HDBaseT Card (F-16). Range up to 70m (230ft) at 2K, 40m (130ft) at 4K @60 (4.2.0) (no Ethernet)
HDCP-IN2-F16	2-Input DVI (HDCP) Card (F-16)
SDIA-IN2-F16	2-Input 3G SDI with Analog Audio Card (F-16)
UHD-IN2-F16	2-Input 4K HDMI Card (F-16)
UHDA-IN2-F16	2-Input 4K HDMI with Selectable Analog Audio Card (F-16)
VGA-IN2-F16	2-Input VGA Card (F-16)
VGAA-IN2-F16	2-Input VGA with Analog Audio Card (F-16)
BLP-F16	Blank Cover Plate for Empty Module Slots
AAD-OUT2-F16	2-Output Analog & Digital Audio Card (F-16)
DGKat-OUT2-F16	2-Output HDMI & RS-232 Input over DGKat Card (F-16)
DL-OUT1-F16	1-Output DVI Dual Link Card (F-16)
DVI-OUT2-F16	2-Output DVI Card (F-16)
F610-OUT2-F16	2-Output DVI over 4LC Fiber Card (F-16)
F670-OUT2-F16	2-Output HDMI over OM3 Fiber Card (F-16)
HH-OUT2-F16	2-Output HDMI Card (F-16)
HAA-OUT2-F16	2-Output HDMI with Analog Audio Card (F-16)
HAD-OUT2-F16	2-Output HDMI with Digital Audio Card (F-16)
HDBT-OUT2-F16	2-Output HDMI over HDBaseT Card (F-16). Range up to 130m (430ft) at 2K
HDBT7-OUT2-F16	2-Output 4K HDMI over HDBaseT Card (F-16). Range up to 70m (230ft) at 2K, 40m (130ft) at 4K @60 (4.2.0) (no Ethernet)
HDCP-OUT2-F16	2-Output DVI (HDCP) Card (F-16)

HS-OUT2-F16	2-Output Scaler Card (F-16)
UHD-OUT2-F16	2-Output 4K HDMI Card (F-16)
UHDA-OUT2-F16	2-Output 4K HDMI with Selectable Analog Audio Card (F-16)
VGA-OUT2-F16	2-Output VGA Card (F-16)
VGAA-OUT2-F16	2-Output VGA with Analog Audio Card (F-16)