



# KRAMER

## VS-1616DN-EM

2x2 to 16x16 Modular 4K60 4:2:0  
Multi-Format Managed 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)



VS-1616DN-EM is a high-performance 2x2 to 16x16 4K@60Hz (4:2:0) modular matrix switcher chassis for AV signals. The unit is a multi-format digital switcher, populated from 2x2 to 16x16 in increments of two inputs and/or two outputs. The chassis includes optional dual, redundant power supplies, a control module and a test module that can monitor and test any input and output in the matrix. VS-1616DN-EM supports a wide variety of input and output cards for different AV signals

## 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

**Kramer Network Management -** Automatic discovery through the network, FW upgrade management for matrix and cards, identify card type and location and indicate card status(module ID, actual firmware versions), matrix switching, specified card features configuration (for example, volume levels on audio cards), Store and Recall of predefined switching scenarios, integrated Maestro automation, and more

**HDTV Compatible**

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

**HDMI Support**

**Cables -** For optimum range and performance, use recommended Kramer cables

**Kramer Equalization & re-Klocking™ 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

**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 de-embedding

**Front Panel Lockout**

**Second Power Supply -** Redundant, hot-swappable (optional)

**Modular Cooling System -** 2 easily replaceable, low-noise, hot-swappable fan racks

**Flexible Control Options -** Front panel, IR remote (available upon request) , RS-232, Ethernet, mini USB port for communicating with unit and FW upgrade, in/out audio jacks for unit testing, and reset button for convenient unit reset (for future use)

**Worldwide Power Supply -** 100-240V AC



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## TECHNICAL SPECIFICATIONS

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INPUTS:	2 to 16 (in increments of 2) of various inputs See ACCESSORIES & RELATED PRODUCTS
OUTPUTS:	2 to 16 (in increments of 2) of various outputs See ACCESSORIES & RELATED PRODUCTS
MAX. DATA RATE:	10.2Gbps (3.4Gbps per graphic channel) depending on the cards used
MAX RESOLUTION:	4K@60Hz (4:2:0)
CONTROLS:	Front panel buttons, infrared remote control transmitter, RS-232, Ethernet, mini USB port, in/out audio testing jacks, and reset button (for future use)
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
INCLUDED ACCESSORIES:	Power cord, infrared remote control transmitter
Product Dimensions	19" x 14.17 x 4U (43.6cm x 36.00cm x 17.70cm) W, D, H
Product Weight	8.9kg (19.6lbs) approx
Shipping Dimensions	0.00cm x 0.00cm x 0.00cm (0.00" x 0.00" x 0.00" ) W, D, H
Shipping Weight	10.2kg (22.5lbs) approx