

## VS-84UT

All-in-One Presentation System with 8x4 4K60 4:2:0 HDMI/HDBaseT 2.0 Matrix Switching, Master Room Controller, PoE & Power Amplifier | HDMI | Speakers | Ethernet - RJ-45 | HDBaseT | 4K/60 UHD (4:2:0)



VS-84UT is an all-in-one 4K@60Hz (4:2:0) audio-video presentation system with integrated range extension and an integrated control system master. The unit switches the video, embeds the audio, and outputs the signal to both HDMI<sup>™</sup> and HDBaseT 2.0 with USB extension and PoE on the HDBaseT output ports. Outstanding audio support includes balanced stereo audio, unbalanced stereo audio, and de-embedded audio sources that output to embedded audio, balanced stereo audio as well as a power amplified audio output. VS-84UT includes a master room controller that can operate over Ethernet (LAN) with control ports that include: one bidirectional RS-485, four RS-232, four IR, four GPI/O, and eight relays to control a wide variety of AV devices. It includes a KNET<sup>™</sup> connector interface that enables access to the master controller from auxiliary room controllers such as control keypads. The unit can also provide power to auxiliary room controllers via the KNET<sup>™</sup> connectors. VS-84UT includes an Ethernet gateway to control and manage remote I/O ports. \*\*\*\*\*The control ports are for K-Config only and not compatible with Kramer Control.\*\*\*

## FEATURES

Versatile All-in-One Solution - Provides a high-performance AV presentation matrix, powerful HDBaseT signal extender and fully featured, programmable master room controller in one unit High-Performance, Professional AV Matrix - Switches 6 4K@60Hz (4:2:0) HDMI inputs and 2 HDBaseT 2.0 signals to 2 4K@60Hz (4:2:0) HDMI outputs and 2 HDBaseT 2.0 signals at up to 10.2Gbps (3.4Gbps per graphics channel) data rate. Signals are HDCP and DVI compliant with Deep Color, 3D, and 7.1 PCM. Includes active source & acceptor detection, auto-switching and auto-scanning of inputs, and a non-volatile memory that retains the last configuration, after switching the power off and then on again

Flexible Audio Extraction, Embedding and Control Options - Includes 4 balanced stereo or 8 microphone audio inputs (selectable), 4 unbalanced stereo inputs, 2 line-out balanced stereo audio outputs and one audio amplified output. Features audio volume control, audio breakaway and AFV (audio-follow-video) operation support. Global mute for both video and audio outputs enables smooth integration of the audio system with a public announcement audio system in case of an emergency event

Powerful HDBaseT Extender - Extends signals up to 100m at 4K @60Hz (4:2:0), up to 130m (430ft) at full HD (1080p @60Hz 36bpp), and up to 180m (590ft) at ultra mode and full HD (1080p @60Hz 24bpp). Featuring Kramer reKlocking<sup>™</sup> and Equalization Technology that rebuilds the digital signal to travel longer distances. Note: For optimum range and performance, use recommended Kramer cables

Programmable Master Room Controller - Connect multiple peripheral devices and control them using intuitive embedded web pages. Schedule actions and macros to automate device control Multi-Client IP - Simultaneous IP control communication with up to 15 IP control clients

Diverse and Abundant Control Port Formats - Includes USB 1.1 & USB 2.0 (up to 127Mbps) via 2 USB type-A and 2 USB type-B ports, 6 IR Ports, 1 Ethernet port, 1 1G Ethernet port for HDBaseT tunneling, 1 K–NET™ connector; 1 RS-485 and 2 RS-232 bidirectional control ports, 4 IR emitter control ports, 4 GPI/O control ports, and 8 relay control ports. \*\*\*\*\*The control ports are for K-Config only and not compatible with Kramer Control.\*\*\*\*

IP Port Extension and Control - Ethernet port connects to control gateways for I/O port extending, and operating IP controlled devices. \*\*\*\*\*The control ports are for K-Config only and not compatible with Kramer Control.\*\*\*\*\*

**Provides Power and Control in a Single Connection** - HDBaseT outputs provide PoE (Power over Ethernet) to compatible devices. K–NET<sup>™</sup> connector carries power along with control communication to either a master room controller or auxiliary control keypad. \*\*\*\*\*The control ports are for K-Config only and not compatible with Kramer Control.\*\*\*\*\*

Control Volume, Sensors, Locks, and Lighting - Using 4 general-purpose (GPI/O) control ports configured as digital input, digital output or analog input interface

Control Screens, Drapes, Shades, Blinds and IR sensors - Using 8 contact closure ports Compatibility with Kramer Software Solutions - Kramer Network Compatible - Remote control and management over customer IP network. Kramer K-Config™ Compatible – Windows based control program with easy configuration and upload to a room controller over customer IP network Advanced EDID Management per Input

Convenient Unit Control and Maintenance Options - User-friendly embedded web pages via the Ethernet, Protocol 3000 API, and RS-232 serial commands transmitted by a PC, touch screen system or other serial controller. Firmware Upgrade over Ethernet via a user-friendly software upgrade tool

Easy Installation - 19" enclosure for rack mounting a unit in a 2U rack space with included rack ears and universal 100-240V AC power connection



## TECHNICAL SPECIFICATIONS

Inputs	6 HDMI On female HDMI connectors
	2 HDBaseT On RJ-45/female HDMI connectors
	4 Unbalanced Stereo Audio On 3.5mm mini jacks
	4 Balanced Stereo Audio/8 Balanced Mic (Selectable) On 5-pin/3-pin terminal block connectors
	2 IR On 3.5mm mini jacks for IR tunneling via HDBaseT
	2 IR (room controller) On 3.5mm mini jacks
Outputs	2 HDMI On female HDMI connectors
	2 HDBaseT On female RJ-45 connectors
	2 Balanced Stereo Audio On 5-pin terminal block connectors
	1 Stereo Speaker Output On a 4-pin terminal block, 2x50W into 4 $\Omega$
	2 IR On 3.5mm mini jacks for IR tunneling via HDBaseT
Ports	1 RS-232 On a 3-pin terminal block for Serial Tunneling via HDBaseT
	1 RS-232 On a 3-pin terminal block for Device Control
	4 (2+2) USB On female USB-A connectors for USB Link Extension
	2 USB On female USB-B connectors for USB Link Extension
	1 Ethernet Control On an RJ-45 female connector for tunnelling data via HDBT ports
	1 Ethernet 1G On an RJ-45 female connector for tunnelling data via HDBT ports
	1 100BaseT Ethernet On an RJ-45 female connector for Device Control and LAN Extension
	1 K-NET 5mm Mini-jack (room controller) On a 4−pin terminal block connector for learning
	1 RS-485 (room controller) On a 3-pin terminal block connector
	4 RS-232 Serial (room controller) On 3-pin terminal blocks
	8 Relays (room controller) on 2-pin terminal block connectors (36V AC or DC, 2A, 60VAC maximum on non-inductive load)
	4 GPI/O (room controller) On 2-pin terminal blocks
Extension Line	Up to 100m (330ft) at 4K@60Hz (4:2:0)
	Up to 130m (430ft) at Full HD (1080p @60Hz 36bpp)
	Up to 180m (590ft) HDBaseT Ultra Mode and Full HD (1080p @60Hz 24bpp)
	Compliance HDBaseT 2.0
User Interface	Indicators ON & STATUS LEDs
	Configuration Switches RS-485 Termination, RS-485 Termination, Programming
Video	Max. Resolution 4K UHD @60Hz (4:2:0) 24bpp resolution)
	Max. Data Rate 10.2Gbps (3.4Gbps per graphic channel)
	Content Protection HDCP 1.4

Analog Audio	Max Vrms Level 1
C	THD + Noise 0.03% @1kHz at nominal level
Extended USB	Host Compliance 1.1 and 2.0
	Max Extended Line Rate Bandwidth 127Mbps (out of max 480 USB)
	Max Devices 7
	Max Hubs 2
	Max Ports per Hub 8
Extended Ethernet	Max Transmission Bandwidth 100Mbps
Extended RS-232	Baud Rate 300 to 57600
Control RS-232	Baud Rate 115200
Supported PC Web Browsers	Windows 7 and Higher Internet Explorer (32/64 bit) version 10, Firefox version 30, Chrome version 35
	MAC Chrome version 35, Firefox version 30, Safari version 7
	Optimal Resolution 1920x1080
	Minimal Resolution 1024 x 768d
Power	Source 100-240V AC, 50/60Hz
	Consumption 200VA
Enclosure	Size 19" (W), 9.3" (H), 2U, rack mountable
	Type Aluminum
	Cooling Fan ventilation
Environmental Conditions	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
Regulatory Compliance (Standards Compliance)	Safety CE, UL
	Environmental RoHs, WEEE
Accessories	Included Power cord
	Optional Recommended Kramer cables, see the CABLES tab
Product Dimensions	43.69cm x 30.60cm x 8.80cm (17.20" x 12.05" x 3.46" ) W, D, H
Product Weight	3.9kg (8.6lbs) approx
Shipping Dimensions	52.60cm x 47.50cm x 18.40cm (20.71" x 18.70" x 7.24" ) W, D, H
Shipping Weight	5.4kg (11.8lbs) approx



