

## 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™ 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™ 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™ connectors. VS-84UT includes an Ethernet gateway to control and manage remote I/O ports

## **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™ 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

IP Port Extension and Control - Ethernet port connects to control gateways for I/O port extending, and operating IP controlled devices

Provides Power and Control in a Single Connection - HDBaseT outputs provide PoE (Power over Ethernet) to compatible devices. K–NET™ connector carries power along with control communication to either a master room controller or auxiliary control keypad

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 $^{\text{TM}}$  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 Indicators ON & STATUS LEDs User Interface Configuration Switches RS-485 Termination, RS-485 Termination, Programming

Content Protection HDCP 1.4

Max. Resolution 4K UHD @60Hz (4:2:0) 24bpp resolution)

Max. Data Rate 10.2Gbps (3.4Gbps per graphic channel)

Video

Analog Audio Max Vrms Level 1

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  $52.60cm \times 47.50cm \times 18.40cm (20.71" \times 18.70" \times 7.24")$  W, D, H

Shipping Weight 5.4kg (11.8lbs) approx



