



## 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™ 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

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|                |                                                                                                                       |
|----------------|-----------------------------------------------------------------------------------------------------------------------|
| 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                                                                                     |
|                                              | 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                                                                               |



