KRAMER

VS-88UT

All−in−One Presentation System with 8x8 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−88UT 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 an HDMI and an 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−88UT 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−88UT 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

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TECHNICAL SPECIFICATIONS

Inputs	4 HDMI On female HDMI connectors
	4 HDBT/4 HDMI (Selectable) 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
	4 IR On 3.5mm mini jacks for IR tunneling via HDBaseT
	2 IR (room controller) On 3.5mm mini jacks
Outputs	6 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 4Ω
	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@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 250VA
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 Dimension	19" x 12.05 x 2U (43.6cm x 30.60cm x 8.80cm) W, D, H
	19" x 7.24 x 2U (43.6cm x 18.40cm x 8.80cm) W, D, H
Product Weight	3.9kg (8.6lbs) approx
	3.9kg (8.6lbs) approx
Shipping Dimension	52.60cm x 47.50cm x 18.40cm (20.71" x 18.70" x 7.24") W, D, H
	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
	5.4kg (11.8lbs) approx