



# 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

Max. Data Rate - 10.2Gbps (3.4Gbps per graphics channel)

Max. Resolution - 4K@60Hz (4:2:0)

Audio Volume Control

HDMI, HDCP and DVI Compliance

HDBaseT Certified - V2.0 support

HDBaseT Extension Reach - Up to 100m at 4K @60Hz (4:2:0), up to 130m (430ft) at full HD (1080p @60Hz 36bpp), up to 180m (590ft) at ultra-mode and full HD (1080p @60Hz 24bpp). For optimum range and performance, use recommended Kramer cables

USB Support - USB 1.1 & USB 2.0 (up to 127Mbps) channeled through HDBaseT

HDMI Support - Deep Color, 3D, ARC, 7.1 PCM

Kramer reKlocking™ and Equalization Technology - Rebuilds the digital signal to travel longer distances

Advanced EDID Management per Input

Active Source & Acceptor Detection

Control Options - RS-232 serial commands transmitted by a PC, touch screen system or other serial controller, Ethernet port via LAN

Kramer K-Config™ Compatible - Windows based control program with easy configuration and upload to room controller over customer IP network

Kramer Network Compatible - Remote control and management over customer IP network

Simultaneous IP Control Communication - With up to 15 IP control clients

Auto-switching and Auto-scanning of Inputs

Audio Breakaway and AFV (audio-follow-video) Operation Support

Global Mute for Both Video and Audio Outputs - Allowing easy integration of the audio system with a public announcement audio system in case of an emergency event

Firmware Upgrade - Ethernet-based, via a user-friendly software upgrade tool

Kramer Protocol 3000 Support

Advanced EDID Management Per Input

unbalanced stereo inputs

**6 HDMI and 2 HDBT Outputs**

**Audio Outputs** - 2 line-out balanced stereo audio outputs and one audio amplified output

**USB Ports** - 2 USB type-A hubs and 2 USB Type-B ports

**6 IR Ports** - For HDBT tunneling

**1 Ethernet Port** - Connects to control gateways for I/O port extending, and controls IP-enabled controlled devices

**1G Ethernet Port** - For tunneling data via HDBT ports

**1 K-NET™ Connector** - Carrying both power and control communication; connects to room control system, either master room controller, or auxiliary control keypads

**1 RS-485 and 2 RS-232 Bidirectional Control Ports** - Control devices via bidirectional serial control protocols

**4 IR Emitter Control Ports** - Control devices via IR control protocols

**4 GPI/O Control Ports** - Control devices via general purpose I/O ports, program-configured as digital input, digital output or analog input interface for controlling sensors, door-locks, audio volume and light dim level, or lighting control devices

**8 Relay Control Ports** - Control devices via relay contact closure, such as scrolling up and down screens, drapes, shades, and blinds

**IR Sensor and IR Input Ports** - Learn commands from IR remotes



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## TECHNICAL SPECIFICATIONS

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4 HDMI	On female HDMI connectors
4HDBaseT / 4HDMI (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
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 4 $\Omega$ or 2x30W into 4 $\Omega$
2 IR	On 3.5mm mini jacks for IR tunneling via HDBaseT
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 (2x2) 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
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

Max. Resolution	4K UHD @60Hz (4:2:0) 24bpp resolution)
Max. Data Rate	10.2Gbps (3.4Gbps per graphic channel)
Standards Compliance	HDMI 2.0 and HDCP 1.4
Max Vrms Level	1
THD + Noise	0.03% @1kHz at nominal level
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
Max Transmission Bandwidth	100Mbps
Baud Rate	300 to 57600
Baud Rate	115200
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
Source	100–240V AC, 50/60Hz
Consumption	250VA
Size	19" (W), 9.3" (H), 2U, rack mountable
Type	Aluminum
Cooling	Fan ventilation
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
Safety	CE, UL
Environmental	RoHs, WEEE
Included	Power cord
Optional	Recommended Kramer cables, see the CABLES tab

