



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, 7.1 PCM

Kramer reClocking™ 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

Includes non-volatile memory - Retains the last settings, after switching the power off and then on again

4 HDMI and 4 HDMI/HDBT (selectable) Inputs

Audio Inputs - 4 balanced stereo audio inputs or 8 microphone inputs (selectable) as well as 4 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 GPIO 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



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 4 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 4Ω or 2x30W 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 (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
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)

Standards Compliance HDMI 2.0 and 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

