



# KRAMER

## VP-451

18G 4K HDR HDMI ProScale™ Digital Scaler  
with HDMI and USB-C Inputs

| HDMI | 4K/60 UHD (4:4:4)



VP-451 is a high-performance 18G 4K digital scaler for HDMI and USB-C signals. The unit up-scales, down-scales, and cross-scales to resolutions up to 4K@60 (4:4:4). The output resolution can be set to automatically follow the native resolution of the sink or set manually to a custom resolution

## FEATURES

**High-Performance Professional Scaler** - Supports HDR10 and HDCP 2.2/1.4, and features input auto-switching, constant sync on the output even if the input video signal is lost or interrupted, and a built-in ProcAmp for convenient signal adjustment

**Fast, Smooth Manual and Auto Switching Between Sources** - Select the USB Type-C or one of the HDMI inputs, or configure the device to automatically select the active source

**Flexible Analog Audio Embedding and Extraction (De-embedding)** - The user can select the unbalanced analog audio input to embed into the HDMI output signal. On the output, the user can select to extract the audio signal and output it as balanced analog audio

**USB-C Powering** - Provides up to 60W of power via the USB-C input

**Automatic Display Control** - Supports CEC that enables automatically turning the display on and off

**Convenient Unit Control** - Control the unit using an OSD (On-Screen Display) via front panel buttons and input selector, video freeze and resolution reset front panel buttons. Additionally, connect to the contact closure connector for remote switching of sources. All settings are saved in non-volatile memory

**User-Friendly Operation** - LED indicator for each input and for power status. Local firmware upgrade via the USB type-A port ensures lasting, field-proven deployment

**Easy Installation** - Compact MegaTOOLS® fan-less enclosure for surface mounting or side-by-side mounting of 2 units in a 1U rack space with the recommended rack adapter



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## TECHNICAL SPECIFICATIONS

Inputs	2 HDMI: On female HDMI connectors  1 USB-C: On a female USB-C connector (DP Alternate Mode)  1 Unbalanced Stereo Audio: On a 3.5mm mini jack
Outputs	1 HDMI: On a female HDMI connector  1 Balanced Analog Stereo Audio: On a 5-pin terminal block
Ports	4 Contact Closure Switches: On a 4-pin terminal block  1 USB: On a USB-A connector for firmware upgrade
Video	Max. Input Resolution: 4K@60 (4:4:4)  Max. Data Rate: 18Gbps (6Gbps per graphic channel)  Input HDMI/USB-C Resolutions:  Output Resolutions:  Latency: 1–2 frames  Content Protection: HDCP 2.2 & 1.4
User Interface	Controls: Input selector, video freeze and resolution reset front panel buttons, OSD menu  Indicators: Selected input and power LEDs
Power	Source: 24V DC  Consumption: Up to 3.4A (when charging USB-C devices at 60W)
Enclosure	Size: MegaTOOLS®  Type: Aluminum  Cooling: Convection 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
Accessories	Included: Power adapter, bracket set, rubber feet

