

VP-475UX

Dual Port 12G SDI to 4K60 4:4:4 HDMI Scaler/Converter with Audio De-embedding

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



VP-475UX is a high-performance, dual channel scaler and format converter for SDI video signals of up to 12G data rate. With its integrated dual scaler, it converts the 12G SDI video signals from its two input channels (with embedded audio) to two 4K@60Hz (4:4:4) HDMI outputs, along with de-embedding the audio signals and sending them to the analog audio output ports

FEATURES

High Performance, Scaled Video Conversion - A high performance, low latency video processing SDI to HDMI converter, with integrated signal resolution scaler, that converts up to 12G multi-rate SDI signals to HDMI signals, flexibly scaling to max resolution of 4K@60 (4:4:4) 18G data rate signals (as specified in HDMI 2.0), independent per each channel

SDI Multi Rate Signals - Auto-adapts from 270Mbps to 12Gbps data rates, accepts SDI, HD-SDI, 3G HD-SDI, 6G and 12G SDI compliant input signals with video resolution of up to 4K@60Hz (4:2:2) 30bpp. Complying with SMPTE 259M (SD-SDI), 292M (HD-SDI), 344M (ED-SDI), 424M (3G HD-SDI), ST-2081 (6G-SDI) and ST-2082 (12G-SDI) standards, it supports pass-through of standard embedded audio channels with ancillary ID and metadata information

Adaptable HDMI Data Rates - Flexibly scales to a wide variety of HDMI data rates, from low 480p to as high as 4K@60Hz (4:4:4) video resolution, adapting to any market-available AV acceptor device, such as displays and projectors

Flexible Audio De-embedding - The user selects to de-embed 2 or 4 of the 16 audio channels embedded within each SDI input signal. The de-embedded audio is then embedded in the corresponding converted HDMI output signal, and, in parallel, is de-embedded and sent to a corresponding device audio output port, either as 2-channel balanced analog or 4-channel AES/EBU-compliant stereo audio signal. This enables high-quality audio playback by routing the audio to external speakers in parallel to routing the audio to the local speakers found on the connected AV acceptor device (such as a TV or laptop)

Reliable Wire Connectivity - Coaxial broadcast-grade cables are reliably connected via lockable BNC connectors, preventing unintentional wire disconnections, to gain fast and highly professional uncompressed SDI signals distribution deployments

Extended-Reach Input Extension - Input signal equalization and output signals reclocking to gain extended-reach signal extension. Using high-quality coaxial SDI cables, supports extension of up to 500m (1640ft) for SD signals; 260m (850ft) for 1.5G HD signals; 220m (720ft) for 3G; 100m (330ft) for 6G HD signals; 70m (230ft) for 12G 4K signals. Note: Reach depends on signal resolution, and quality of copper cable used. For optimal performance, Kramer recommends using Kramer high-performance cables. Reach extension performance may vary while using coaxial cables that are not high-quality

Cost-Effective Maintenance - Indicators for SDI input signals status and data rate, and power status, for easy local maintenance and troubleshooting. Remote device management via built-in web UI. Local and remote firmware upgrade via mini-USB or Ethernet connection ensure lasting, field-proven deployment

Easy Installation - 19" enclosure for rack mounting a unit in a 1U rack space with included rack ears and universal 100–240V AC power connection



TECHNICAL SPECIFICATIONS

Inputs 2 SDI Auto-sensing 12G/6G/HD-SDI/HD-SDI/SDI Video Signal : On 75Ω BNC

connectors

Outputs 2 HDMI: On female HDMI connectors

2 SDI (Input Loop): On 75Ω female BNC connectors

2 XLR Balanced Stereo Audio or AES/EBU Digital Audio: On XLR connectors

Ports:

Ports 1 Ethernet: On an RJ-45 female connector

1 USB: On a female mini USB connector

Video Standards: 12G-SDI - SMPTE ST-2082-1, 3G HD-SDI - SMPTE 424M, 6G -

SMPTE ST-2081, HD-SDI - SMPTE 292M/344M, SDI - SMPTE 259M

Max SDI Input Resolution: 4K@60Hz (4:2:2)

SDI Input Data Rate: 259Mbps up to 12Gbps

Max HDMI Resolution: 4K@60Hz (4:4:4) as specified in HDMI 2.0

HDMI Output Resolutions: Progressive: Native, 640x480@60Hz, 720x480@60Hz, 720x576@50Hz, 800x600@60Hz, 1024x768@60Hz, 1280x720@50/60Hz,

1280x720@50/60Hz, 1280x768@60Hz, 1280x1024@60Hz, 1600x1200@60Hz,

1680x1050@60Hz, 1920x1080@24/25/30/50/60Hz, 1920x1200@60Hz,

3840x2160@24/25/30/50/60Hz

Conversion Latency: 2 frames, i.e. 35ms@60Hz and 70ms@30Hz (approx.)

Max SDI Input Reach 12G-SDI Signals: 70m (230ft)

6G HD-SDI Signals: 100m (330ft)

3G HD-SDI Signals: 220m (720ft)

HD-SDI Signals: 260m (850ft)

SD Signals: 500m (1640ft)

User Interface Indicators: IN LEDs

Controls: Mini USB, LAN, web UI

Power Source: 100-240V AC

Consumption: 58VA max

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%, RH non-condensing

Enclosure Size: 19", 1U

Type: Aluminum

Cooling: Fan Ventilation

STANDARDS COMPLIANCE Safety: CE

Environmental: RoHs, WEEE

Accessories Included: Power cord

Product Dimensions 43.64cm x 23.72cm x 4.36cm (17.18" x 9.34" x 1.72") W, D, H

Product Weight 1.8kg (3.9lbs) approx

Shipping Dimensions $52.50 \text{cm} \times 23.00 \text{cm} \times 10.70 \text{cm} (20.67" \times 9.06" \times 4.21") \text{ W, D, H}$

Shipping Weight 2.6kg (5.8lbs) approx



