ASPEN-1616UX is a 16x16 matrix switcher for SDI signals of up to 12G. It equalizes the input signal and reclocks the output signal to gain extended-reach signal extension. ASPEN-1616UX is easy to operate and control through the network using the intuitive web pages and through RS-232 using a serial controller.

FEATURES

High-Performance Matrix Switcher - Switches 16 12G SDI inputs to 16 12G SDI outputs with a maximum resolution of 4K@60Hz (4:2:2). Features Kramer Equalization & reKlocking™ Technology that rebuilds the digital signal to travel longer distances.

HDTV Compatible

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.

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 300m (984ft) for SD signals; 200m (656ft) for 1.5G HD signals; 100m (328ft) for 3G and 6G HD signals; 80m (260ft) for 12G 4K signals. Note: Reach depends on signal resolution, and quality of copper cable used. Reach extension performance may vary while using coaxial cables that are not high-quality.

Genlock Clean Switching and Versatility - Clean switching when the sources are genlocked to the selected genlock input with a difference of no more than two lines of video. Versatile Genlocking using an analog signal.

Convenient and Comprehensive Control - Control the unit using intuitive embedded web pages via the Ethernet or Protocol 3000 API commands via RS-232 serial communication transmitted by a PC, touch screen system or other serial controller. Stores 8 multiple switches as presets to be recalled and executed when needed. Upgrade firmware via the embedded webpages.

Compact and Easy to Install - 19” wide and only 4” deep enclosure for rack mounting a unit in a 1U rack space with included rack ears.
TECHNICAL SPECIFICATIONS

Inputs
16 12G SDI/HD-SDI/SDI Video: 75Ω on BNC connectors
1 Genlock: Looping on a BNC connector

Outputs
16 12G SDI/HD-SDI/SDI Video: 75Ω on BNC connectors
1 Genlock Loop: Passive loop output on a BNC connector

Video
Max Resolution: 4K@60Hz (4:2:2)
Max Bandwidth: 12Gbps

Extension Line
SD Signals: Up to 300m
1.5G HD Signals: Up to 200m
3G Signals: Up to 100m
6G Signals: Up to 100m
12G Signals: Up to 80m
Coupling: DC

User Interface
Controls: Remote RS-232, Ethernet, web pages

Power
Consumption: 12V DC, 1.35A
Source: 12V DC, 5A

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

STANDARDS COMPLIANCE
Safety: CE
Environmental: RoHs, WEEE

Enclosure
Size: 19", 1U
Type: Aluminum
Cooling: Fan Ventilation

Accessories
Included: Power adapter
Cables (Recommended): Belden 4794R and 4855R 12G SDI coax cables