**Blackmagic**design

# Smart Videohub
# CleanSwitch 12x12

Compact 6G-SDI router with built in re-synchronizers on all inputs allows clean switching between all video sources of the same video standard, and can be used as 12 re-synchronizers for automatic re-timing of SDI feeds. Smart Videohub CleanSwitch supports 12 inputs and 12 outputs in virtually all SD, HD and Ultra HD video formats. Supports multiple formats on the same router at the same time and will clean switch between multiple formats that match the reference frame rate when the switching is between the same video standard. Includes front panel button and spin knob routing, elegant machined metal front panel with LCD for routing display and video monitoring and remote Ethernet control.

**$1,495**

## Connections

### SDI Video Input
12 x 10-bit SD-SDI, HD-SDI and 6G-SDI.

### SDI Video Output
12 x 10-bit SD-SDI, HD-SDI and 6G-SDI.

### Reference Input
Blackburst for SD and Tri-Sync for HD and 4K.

### Multi Rate Support
Auto detection of SD, HD or 6G-SDI. Simultaneous routing of 4K, HD, SD video and DVB-ASI.

### Updates
USB or Ethernet.

### Front Panel Router Control
12 buttons for local control of Videohub. 6 buttons and scroll wheel for control of LCD display or RJ45 Ethernet.
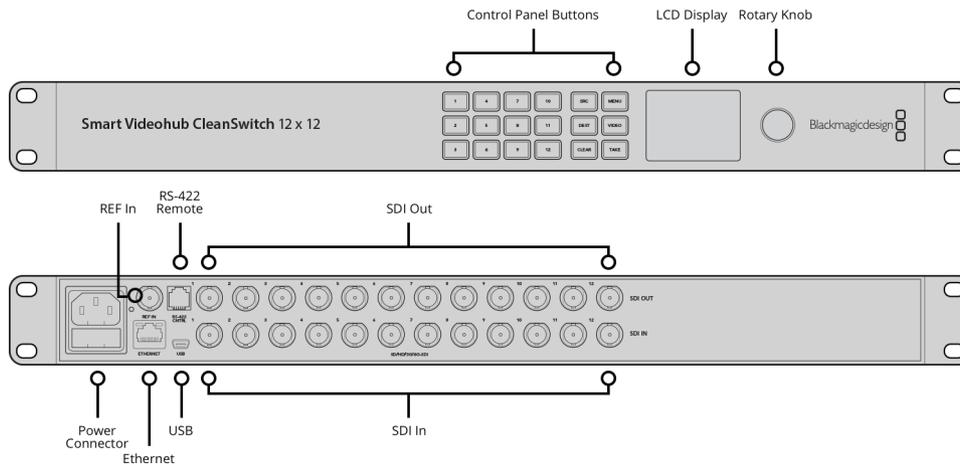
### Router Configuration
Via front panel LCD or RJ45 Ethernet.

### RS-422 Router Control
1 x input for controlling router crosspoint switching.

### Reclocking
On all SDI outputs, auto switching between standard definition, high definition or 6G-SDI video.

## Standards

### SD Format Support
625/25 PAL, 525/29.97 NTSC and 525/23.98 NTSC.

### HD Format Support
1280 x 720p50, 1280 x 720p59.94, 1280 x 720p60, 1920 x 1080i50, 1920 x 1080i59.94, 1920 x 1080i60, 1920 x 1080PsF23.98, 1920 x 1080PsF24, 1920 x 1080PsF25, 1920 x 1080PsF29.97, 1920 x 1080PsF30, 1920 x 1080p23.98, 1920 x 1080p24, 1920 x 1080p25, 1920 x 1080p29.97, 1920 x 1080p30, 1920 x 1080p50, 1920 x 1080p59.94, 1920 x 1080p60.

### 2K Format Support
2048 x 1080p23.98, 2048 x 1080p24, 2048 x 1080p25, 2048 x 1080PsF23.98, 2048 x 1080PsF24, 2048 x 1080PsF25

### 4K Format Support
3840 x 2160p23.98, 3840 x 2160p24, 3840 x 2160p25, 3840 x 2160p29.97, 3840 x 2160p30, 4096 x 2160p23.98, 4096 x 2160p24, 4096 x 2160p25, 4096 x 2160p29.97, 4096 x 2160p30

### SDI Compliance
SMPTE 259M, SMPTE 292M, SMPTE 296M, SMPTE 310M, SMPTE 425M Level B, ITU-R BT.656 and ITU-R BT.601.

### SDI Video rates
SDI video inputs are switchable between standard definition, high definition and 4K. SDI switches between 270 Mb/s standard definition SDI, 1.5 Gb/s HD-SDI, 3G-SDI and 6G-SDI.

### SDI Video Sampling
4:2:2 and 4:4:4

### SDI Audio Sampling
Television standard sample rate of 48kHz and 24 bit.

### SDI Color Precision
4:2:2 and 4:4:4 10 bit.

### SDI Color Space
YUV or RGB.

### SDI Auto Switching
Automatically selects between SD-SDI, HD-SDI, 6G-SDI and DVB-ASI on each input so that each input can be running a different television standard.

### SDI Metadata Support
Video payload identification ancillary data as per SMPTE 352M.

## Display

### Display
Built-in LCD for video and menu settings.

## Software

**Software Control**
Router control included free for
Windows™ and Mac OS X™.

**Internal Software Upgrade**
Via included updater application.

## Operating Systems

Mac OS X 10.10 Yosemite,
Mac OS X 10.11 El Capitan
or later.

Windows 8.1 or
Windows 10.

## Power Requirements

**Power Fail Protection**
Router connections preserved and
restored instantly at power on.

**Power Supply**
IEC power cable required. 90 - 240V
AC input.

**Power Consumption**
35 Watts

## Physical Specifications



1.75 in

19 in

6.30 in

LB
4.14 lb

## Physical Installation

**Physical Installation**
1 rack unit size. Less than 6 inches deep.

## Environmental Specifications

**Operating Temperature**
0° to 40° C (32° to 104° F)

**Storage Temperature**
-20° to 45° C (-4° to 113° F)

**Relative Humidity**
0% to 90% non-condensing

## What's Included

Smart Videohub CleanSwitch 12x12
Software SD card

## Warranty

12 Month Limited Manufacturer's Warranty.

Blackmagic Design Authorized Reseller