



WWW.AVMATRIX.COM

Video Switcher  
PTZ Camera  
Matrix Switcher  
USB Capture  
Video Encoder  
Multiviewer  
Fiber Optic Extender  
Video Signal Converter  
Video Signal Generator  
Distribution Amplifier

**AVMATRIX®**

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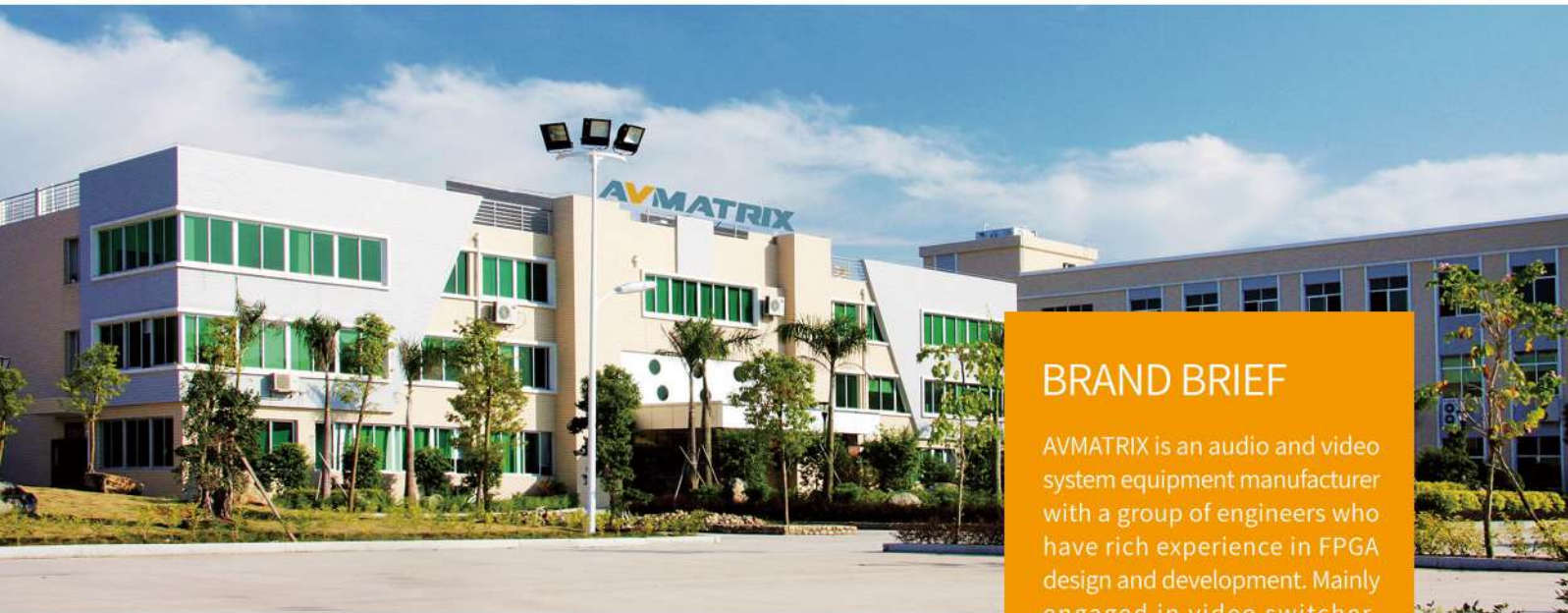
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Note: due to constant effort to improve products and product features, specifications may change without notice.

# PROFESSIONAL AUDIO & VIDEO

EQUIPMENT MANUFACTURER

# ABOUT US



## OUR COMPANY

AVMATRIX is specialized in processing high definition video signals for years. It's a high-tech enterprise involved in design, developing, manufacturing and marketing of professional video processing system.

## BRAND BRIEF

AVMATRIX is an audio and video system equipment manufacturer with a group of engineers who have rich experience in FPGA design and development. Mainly engaged in video switcher, converter, PTZ camera, matrix switcher, USB capture, video encoder, multiviewer, fiber optic extender, video signal generator, distribution amplifier, and other professional AV equipment.



Video Switcher



PTZ Camera



PCIE Video Capture



Streaming Encoder



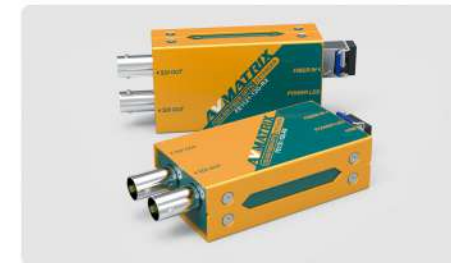
USB Video Capture



Video Signal Converter



Distribution Amplifier



Fiber Optic Extender



Matrix Multiviewer



# VIDEO SWITCHER

Seamless Multi-format video switcher with audio mixer, which is compatible with more different equipments and more flexible in various applications. They can be used in varieties of venues for events, seminars, etc.

- Inputs signal is auto-detected while PGM output can be scaled
- Chroma/luma key, POP/PIP and USB capture out for live streaming



## VS0605E

### 6CH HDMI/SDI VIDEO SWITCHER

- 5 inch LCD display
- Input: 4×SDI and 2×HDMI
- Output: 3×SDI AUX , 1× HDMI Multiview, 1×USB Type-C
- PGM output: 1×SDI, 1×HDMI
- All outputs are configurable and assignable
- Professional Luma Key/ Chroma Key
- 2PIP/ POP, downstream key and LOGO overlay
- PTZ camera control: Visca & Pelco protocol
- Support landscape and portrait mode
- USB for capturing and streaming on PC
- RTMP stream & USB disk/ SD card record
- Audio mixer: 4×SDI, 2×HDMI audio & 2×MIC in
- Audio delay available
- T-bar/ Auto/ Cut transitions
- Various effects: MIX/ FADE/ WIPE effects
- FTB/ MUTE/ STILL, GPIO port for tally system



## PVS0403U/E

### 10.1" 4CH HDMI/SDI VIDEO SWITCHER

- 10.1 inch FHD IPS LCD display
- Input: 2×HDMI and 2×3G-SDI
- Output: 2×HDMI PGM, 1× Multiview, 1×USB Type-C
- RTMP stream & USB disk/ SD card record (PVS0403E)
- AUX output configurable and assignable
- USB for capturing and streaming on PC
- Upstream key: Luma key, Chroma key, PIP×2/ POP
- Downstream key and LOGO overlay
- T-bar/ Auto/ Cut transitions
- Audio mixer: 2×SDI, 2×HDMI audio & 2×MIC/ Line In
- Audio delay available
- 39 default patterns, 16 imported images
- 16 captured images, 2 color generators
- LAN port for PC software remote control
- FTB/ MUTE/ STILL effects
- GPIO port for tally system



## PVS0402U/E

### 10.1" 4CH HDMI VIDEO SWITCHER

- 10.1 inch FHD IPS LCD display
- Input: 4×HDMI
- Output: 1×HDMI PGM, 1× Multiview, 1×USB Type-C
- RTMP stream & USB disk/ SD card record(PVS0402E)
- USB for capturing and streaming on PC
- AUX output configurable and assignable
- Upstream key: Luma key, Chroma key, PIP×2/ POP
- Downstream key and LOGO overlay
- T-bar/ Auto/ Cut transitions
- Various effects: WIPE(11×3 patterns) / MIX/ DIP
- Audio mixer: 4×HDMI audio & 2×MIC/ Line In
- Audio delay available
- 39 default patterns, 2 color generators
- 16 captured images, 16 imported images
- LAN port for PC software remote control
- FTB/ MUTE/ STILL/ GPIO for tally
- Customer configuration import and export







## HVS0403U/E

### 4CH HDMI/SDI VIDEO SWITCHER

- Input: 2xHDMI and 2x3G-SDI
- Output: 2xHDMI PGM, 1x Multiview, 1xUSB Type-C
- RTMP stream & USB disk/ SD card record (HVS0403E)
- All outputs are configurable and assignable
- USB for capturing and streaming
- Clearly visible multiview & status page
- Upstream key: Luma key, Chroma key, 2xPIP/ POP
- Downstream key and LOGO overlay
- T-bar/ Auto/ Cut transitions
- Audio mixer: 2xSDI, 2xHDMI audio & 2xMIC/ Line In
- Audio delay available
- 39 default patterns, 16 imported images
- 16 captured images, 2 color generators
- LAN port for PC software remote control
- FTB/ MUTE/ STILL effects
- GPIO port for tally system



## HVS0402U/E

### 4CH HDMI VIDEO SWITCHER

- Input: 4xHDMI
- Output: 1xHDMI PGM, 1x Multiview, 1xUSB Type-C
- RTMP stream & USB disk/ SD card record (HVS0402E)
- USB type-C output for capturing and streaming
- All outputs are configurable and assignable
- Clearly visible multiview & status page
- Upstream key: Luma key, Chroma key, PIPx2/ POP
- Downstream key and LOGO overlay
- T-bar/ Auto/ Cut transitions
- various effects: WIPE(11x3 patterns) / MIX/ DIP
- Audio mixer: 4xHDMI audio & 2xMIC/ Line In
- Audio delay available
- 39 default patterns, 2 color generators
- 16 captured images, 16 imported images
- LAN port for PC software remote control
- FTB/ MUTE/ STILL/ GPIO for tally
- Customer configuration import and export



## HVS0401U/E

### 4CH HDMI/ DP VIDEO SWITCHER

- Input 1~3: HDMI, Input 4: HDMI/DP
- Output: 2xHDMI PGM, 1xMultiview, 1xUSB Type-C
- RTMP stream & USB disk/ SD card record (HVS0401E)
- USB Type-C for video capturing (UVC)
- PIP function, adjustable size and position
- Audio mixer: 3.5mm stereo / MIC/ HDMI embedded audio
- AUTO/ CUT transitions and MIX/ FADE/ WIPE effects
- GPIO interface for live tally system
- FTB for emergency situation



## PVS0615U

### 15.6" 6CH VIDEO SWITCHER

- Portable All-In-One design
- 15.6 inch FHD LCD display
- Uncompressed USB capture for streaming
- Input: 4xSDI and 2xDVI-I/ HDMI/ VGA/ USB player
- PGM Output: 3xSDI(1xPVW), 2xHDMI
- Multiview output: 1xHDMI
- Auto-detected multi-format inputs
- Output format selectable
- T-Bar/ Auto/ Cut transitions
- MIX/ FADE/ WIPE/ FTB effects
- Luma Key/ Chroma Key for virtual studio
- PIP/ POP window size and position adjustable
- Record PGM video to SD card, up to 1080p60
- Audio mixer: TRS audio & SDI, HDMI, USB audio
- GPIO port for tally system



## PVS0613U

### 13.3" 6CH VIDEO SWITCHER

- Portable All-In-One design
- 13.3 inch FHD LCD display
- Uncompressed USB capture for streaming
- Input: 4xSDI and 2xHDMI
- Output: 2xSDI PGM, 1xHDMI PGM, 1xSDI AUX
- Multiview output: 1xSDI, 1xHDMI
- Auto-detected multi-format inputs
- Output format selectable
- T-Bar/ Auto/ Cut transitions
- MIX/ FADE/ WIPE/ FTB effects
- PIP/ POP window size and position adjustable
- Audio mixer: 3.5mm stereo/ RCA & SDI/ HDMI audio
- GPIO port for tally system





## VS0605U

### 6CH HDMI/SDI VIDEO SWITCHER

- Uncompressed USB capture for streaming
- Input: 4×SDI and 2×DVI-I/HDMI/VGA/USB player
- Output: 2×SDI & 1×HDMI PGM, 1×SDI PVW
- Multiview output: 1×SDI, 1×HDMI
- Input format auto-detected
- Output format selectable
- PTZ camera control: Visca & Pelco protocol
- T-Bar/ AUTO/ CUT transitions
- MIX/ FADE/ WIPE effects
- Luma Key/ Chroma Key for virtual studio
- PIP/ POP window size and position adjustable
- Record PGM video to SD card, up to 1080p60
- Audio mixer: XLR/RCA & SDI, HDMI, USB audio
- GPIO port for tally system



## VS0601U

### 6CH HDMI/SDI VIDEO SWITCHER

- Uncompressed USB capture for streaming
- Input: 4×SDI and 2×HDMI
- Output: 2×SDI PGM, 1×HDMI PGM, 1×SDI AUX
- Multiview output: 1×SDI, 1×HDMI
- Auto-detected multi-format inputs
- Output format selectable
- T-Bar/ AUTO/ CUT transitions
- MIX/ FADE/ WIPE/ FTB effects
- PIP/ POP window size and position adjustable
- Audio mixer: 3.5mm stereo/ RCA & SDI/ HDMI audio
- GPIO port for tally system



## TS3019

### WIRELESS TALLY SYSTEM

- Transmission distance up to 200m in open space
- Transmitter with GPIO/USB/RS-232
- Compatible with video switcher, Vmix, etc.
- Supports up to 12 tally lights
- Support wireless/wired tally connection
- RS232 wireless transmission for PTZ control
- USB or 18650 lithium battery power supply
- Red&green dual-color light and 4 brightness levels
- Supports signal strength and power status display
- Receiver light with hotshoe 1/4 inch hole



TS3019-4 (4 Lamp Suits)



TS3019-6 (6 Lamp Suits)

**Note:** Number of lamps optional, up to 12 Tally lamps.



# USB VIDEO CAPTURE

USB capture series are professional devices to capture uncompressed SDI or HDMI signal over USB for graphics capture, streaming, recording on your PC or Mac. USB capture products support drive-free and power-free. And it's convenient for applications in various fields such as broadcasting, live streaming, medical education, and video conferencing.

## UC2218-4K

### DUAL HDMI TO USB3.0 CAPTURE BOX

- Input: 4K HDMI in, HDMI in, Mic/Line audio in
- Output: 4K HDMI loopout, audio out
- USB3.0(USB3.1 GEN1), comply with UVC and UAC
- Automatic input signal detection, up to 4K60Hz
- Capture two HDMI videos and audios simultaneously
- Uncompressed video & audio capture
- Plug-and-Play, driver free & power free
- Compatible with Windows, Linux, macOS
- Compatible with OBS, ZOOM, Teams, Twitch, etc.



## UC1218-4K

### 4K HDMI TO USB3.0 CAPTURE BOX

- Input: 4K HDMI in, Mic/Line audio in
- Output: 4K HDMI loopout, HDMI out, audio out
- USB3.0(USB3.1 GEN1), comply with UVC and UAC
- Automatic input signal detection, up to 4K60Hz
- Down scaled 1080p60 HDMI out
- Uncompressed video & audio capture
- Plug-and-Play, driver free & power free
- Compatible with Windows, Linux, macOS
- Compatible with OBS, ZOOM, Teams, Twitch, etc.



## UC2018

SDI/HDMI TO USB3.0 CAPTURE BOX

## UC1118

SDI TO USB3.0 CAPTURE BOX

## UC1218

HDMI TO USB3.0 CAPTURE BOX

# PCIE VIDEO CAPTURE

PCIE capture series are professional devices to capture uncompressed SDI or 4K HDMI signal over PCIE for graphics capture, streaming, recording.

Using PCIE GEN 2 interface with 2.5GB/s transmission bandwidth, PCIE card can meet the needs of high-bandwidth, high-performance image acquisition and processing applications, ideal for use in live streaming platforms.



## VC12-4K

### 4K HDMI PCIE CAPTURE CARD

- 1CH HDMI 2.0 input/loop-out
- Input and capture support up to 4K60
- Bit Rate up to 800Mbps
- Support YUY2 uncompressed video
- PCIE GEN2x4, 2.5GB/S transfer bandwidth
- Support Win 7 and above
- Compatible with OBS/PotPlayer/XSplit, etc.
- Stable operation, 24 hours non-stop work
- Support one machine with multiple cards



## VC41

### 4CH 3G-SDI PCIE CAPTURE CARD

- 4CH 3G-SDI simultaneous input and capture
- Capture up to 1080p60, bit rate up to 200Mbps
- Support YUY2 uncompressed video
- PCIE GEN2x4, 2.5GB/S transfer bandwidth
- Support portrait and landscape mode
- Support Win 7 and above, Linux 18.04 and above
- Compatible with OBS/PotPlayer/XSplit, etc.
- Stable operation, 24 hours non-stop work
- Support one machine with multiple cards



## VC42

### 4CH HDMI PCIE CAPTURE CARD

- 4CH HDMI simultaneous input and capture
- Capture up to 1080p60, bit rate up to 200Mbps
- Support YUY2 uncompressed video
- PCIE GEN2x4, 2.5GB/S transfer bandwidth
- Support portrait and landscape mode
- Support Win 7 and above, Linux 18.04 and above
- Compatible with OBS/PotPlayer/XSplit, etc.
- Stable operation, 24 hours non-stop work
- Support one machine with multiple cards





## STREAMING ENCODER

The encoder can transmit video signals directly to various live streaming platforms over the network without the need for a smart phone or computer. Encoder supports H.265/H.264 streaming encoding protocols up to 1080p60hz, and streaming protocols: RTSP, RTP, RTMPS, RTMP, HTTP, UDP, SRT, unicast and multicast.



### SE2017

#### SDI/HDMI ENCODER & RECORDER

- Inputs: 1×HDMI, 1×SDI, 1×Analog audio input
- Outputs: 1×HDMI loopout, 1×SDI loopout
- Built-in recorder, USB disk/ SD card for recording
- H.265/264 stream encode protocol, up to 1080p60hz
- Dual-stream (main stream and sub stream)
- RTSP, RTMPS, RTMP, HTTP, SRT, unicast, multicast
- Video and audio streaming or single audio streaming
- Mirror image & upside-down image
- Live stream with no need for connecting a computer



### SE1117

#### SDI H.265/264 STREAMING ENCODER

- 1×SDI input, 1×SDI loop out, 1×Analog audio input
- H.265/264 stream encode protocol, up to 1080p60hz
- Dual-stream (main stream and sub stream)
- RTSP, RTMPS, RTMP, HTTP, SRT, unicast, multicast
- Video and audio streaming or single audio streaming
- Image and text overlay
- Mirror image & upside-down image
- Live stream with no need for connecting a computer



### SE1217

#### HDMI H.265/264 STREAMING ENCODER

- 1×HDMI input, 1×HDMI loop out, 1×Analog audio input
- H.265/264 stream encode protocol, up to 1080p60hz
- Dual-stream (main stream and sub stream)
- RTSP, RTMPS, RTMP, HTTP, SRT, unicast, multicast
- Video and audio streaming or single audio streaming
- Image and text overlay
- Mirror image & upside-down image
- Live stream with no need for connecting a computer





# FULL HD PTZ CAMERA

AVMATRIX PTZ Cameras are industry's advanced live streaming pan, tilt, and zoom network connected cameras. PTZ cameras are used to produce video content for a variety of applications. Here is a short list of examples:

- Video Communications (Meetings, Webinars, Telemedicine, Distance Learning)
- Live Video Production (Events, Conferences, Studios)
- Live Streaming (Church Services, Product Launches, Sporting Events)



## PTZ1271

### FULL HD HDMI/ SDI PTZ CAMERA

- 20x/30x optical zoom lens for option
- HDMI, 3G-SDI, & LAN output
- Control protocol: VISCA, PELCO-D/-P & Onvif
- LAN port for video stream: RTMP, RTSP & Onvif
- 3.5mm stereo audio(line-level) in
- POE (Power Over Ethernet) & NDI | HX



## PKC3000

### IP PTZ CAMERA CONTROLLER

- VISCA/VISCA-SONY/VISCA Over IP/Pelco P&D/ONVIF protocols
- Support RS-422/RS-485/RS-232/IP control
- Automatically search and Assign IP addresses easily
- Control up to 255 IP cameras on a single network
- Metal housing with LCD display and 4D joystick
- 6 user-assignable keys to quickly invoke functions
- Quick control: exposure/iris/focus/pan/tilt, etc
- Supports POE and 12V DC power supplies





## BROADCAST BOX SERIES

The converter series are professional devices to convert HDMI/SDI or AV signals to HDMI/SDI signals up to 1080P60Hz. The converter is your ideal choice for broadcasting and AV post production applications.



### SC2030

#### 3G-SDI/ HDMI CROSS CONVERTER

- Input: 1×HDMI/ 3G-SDI, 1×analog audio
- Output: 2×3G-SDI, 1×HDMI
- Up/down scaling and frame rate conversion
- Input signal automatic detection and configuration
- Analog audio Embedding
- Control easily via the DIP switches & PC software
- USB /Dual threaded DC power supply
- Detachable bracket design for wall mounting



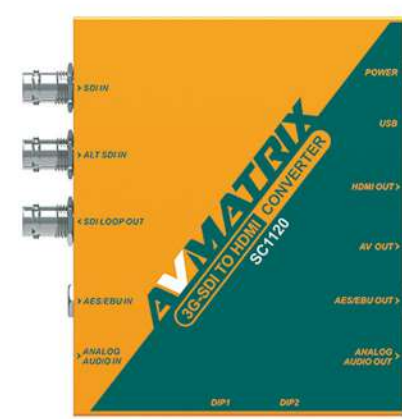
### Mini SC1112

3G-SDI TO HDMI MINI CONVERTER



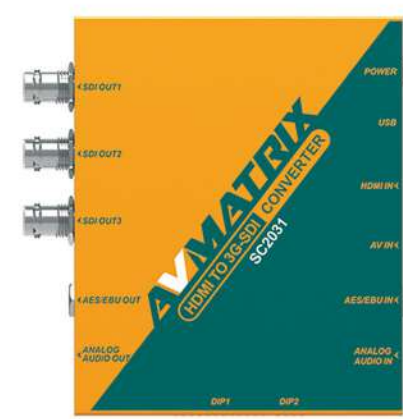
### Mini SC1221

HDMI TO 3G-SDI MINI CONVERTER



### SC1120

3G-SDI TO HDMI SCALING CONVERTER



### SC2031

HDMI TO 3G-SDI SCALING CONVERTER



# DISTRIBUTION AMPLIFIER

The distribution amplifier features cable equalization and re-clocking technique.

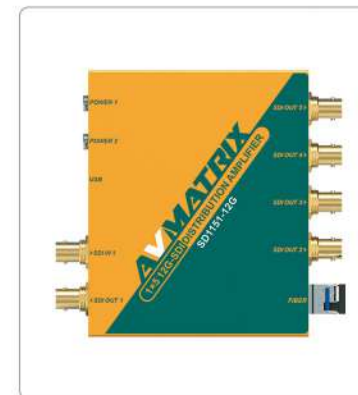
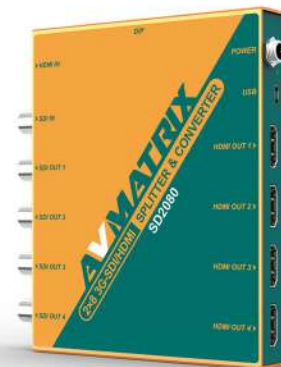
The distribution amplifier is also an ASI distributor amplifier that all input and outputs are compatible with ASI signal. It is ideal for broadcast and AV post-production applications.



## SD2080

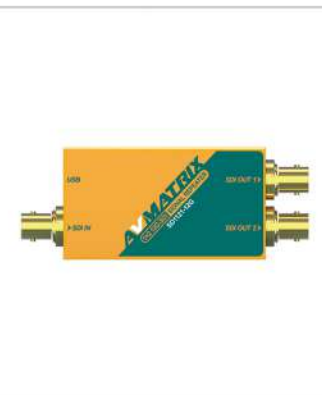
### 2x8 SDI/HDMI SPLITTER & CONVERTER

- Input: 1xHDMI/1x3G-SDI
- Output: 4x3G-SDI, 4xHDMI
- Distribute and convert between SDI & HDMI
- Input signal automatic detection and configuration
- Input and output support up to 1080p60
- Control easily via DIP switches
- USB and threaded locking power supply
- Detachable bracket design for wall mounting



## SD1151-12G

1x5 12G-SDI DISTRIBUTION AMPLIFIER



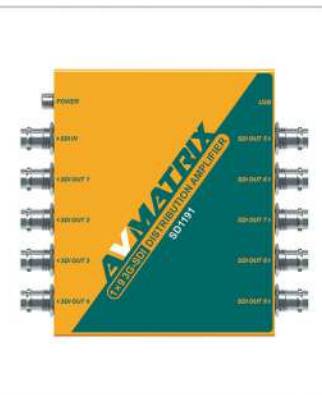
## SD1121-12G

1x2 12G-SDI DISTRIBUTION AMPLIFIER



## SD1141

1x4 3G-SDI DISTRIBUTION AMPLIFIER



## SD1191

1x9 3G-SDI DISTRIBUTION AMPLIFIER



## FIBER OPTIC EXTENDER

Fiber Optic Extender is a transmitter/receiver kit supporting single-mode LC simplex fiber extensions. It supports all SDI formats resolution up to 4K with audio and metadata.



### FE1121-12G

#### 12G-SDI FIBER OPTIC EXTENDER

- 12G-SDI input & loopout on transmitter
- Dual 12G-SDI outputs on receiver
- Automatically detects SD, HD, 3G, 6G and 12G-SDI
- 10km transmission distance
- SFP/ LC Fiber transmitter & receiver
- Automatic cable equalization and signal retiming
- 5V USB power supply
- Detachable bracket design for wall mounting



### FE1121

#### 3G-SDI FIBER OPTIC EXTENDER

- 3G-SDI input & loopout on transmitter
- Dual 3G-SDI outputs on receiver
- SDI equalization and re-clocking
- Support 3Gbit Level A and Level B (all formats)
- 20km transmission distance
- SFP/ LC Fiber transmitter & receiver
- 5V USB power supply
- Detachable bracket design for wall mounting





# RACKMOUNT DEVICES

Matrix switchers are designed to seamlessly switch 3G-SDI/HDMI video signals that comply with SMPTE and ITU standards.

Unique and compact, matrix switchers supports dual power and can be easily installed in standard cabinets. They are widely used in server room and PRO AV projects.



## MMV1630

### 16CH SDI MULTIVIEWER & SWITCHER

- 16CH multiviewer mode and 16x16 switcher mode
- Switcher input: 16x3G-SDI
- Switcher output: 16x3G-SDI
- Multiview output: 2x3G-SDI & 1xHDMI
- SDI input signal auto detection & equalization
- Full screen, and 20 preset multiview layouts
- Time code, UMD, signal status and audio meter
- Front panel buttons and knob control with LCD
- Dual power design, redundant power
- Free PC software control: LAN, RS-422



## MSS1611-S

### 16x16 SEAMLESS MATRIX SWITCHER

- Input: 16x3G-SDI
- Output: 16x3G-SDI
- Seamless switching
- SDI input signal auto detection & equalization
- Free PC software control: LAN, RS-422
- Front panel buttons and knob control with LCD
- Dual power design, redundant power



## MSS0811

### 8x8 SDI MATRIX SWITCHER

- Input: 8x3G-SDI
- Output: 8x3G-SDI
- SDI input signal auto detection & equalization
- Pass all ancillary data and embedded audio
- DVB-ASI interface compatible
- Free PC software control: LAN, RS-232
- Front panel buttons and knob control with LCD
- USB for keyboard control
- Dual power design, redundant power



## OTHER

AVMATRIX focus on developing and manufacturing pro test equipment, including multi-viewer and signal generator, etc. They are useful for broadcast television, video conference, digital medical, security, education, industry, and other video industries.



## MV0430

### 4CH 3G-SDI MULTIVIEWER

- Input: 4×3G-SDI
- Output: 2×3G-SDI and 1×HDMI multi-view
- 11 selectable SDI & HDMI output formats
- 16 preset layouts, full-screen & multi-view mode
- 11 character UMD overlay, custom position & color
- Audio level meter overlay, support custom position
- Control via the DIP, USB keyboard and PC
- 12V DC power supply
- Detachable bracket design for wall mounting



## PG4K

### 12G-SDI/ HDMI2.0 SIGNAL GENERATOR

- 12G-SDI single link, dual link, quad link (SQD/ 2SI)
- Support 6G-SDI, 3G-SDI level A and level B
- Support 4K HDMI2.0 video outputs
- Support 12G-SDI fiber signal (SFP optional)
- 16-Channel SDI audio generation
- Built-in patterns: Color bar, pathology patterns
- USB Port for import the patterns
- Time code, frame counter test and moving test
- REF in for frame synchronization

