8CH MULTI-FORMAT VIDEO SWITCHER

MS-8

For Video Conference & Presentation

The introduction of an unparalleled switchable converter.

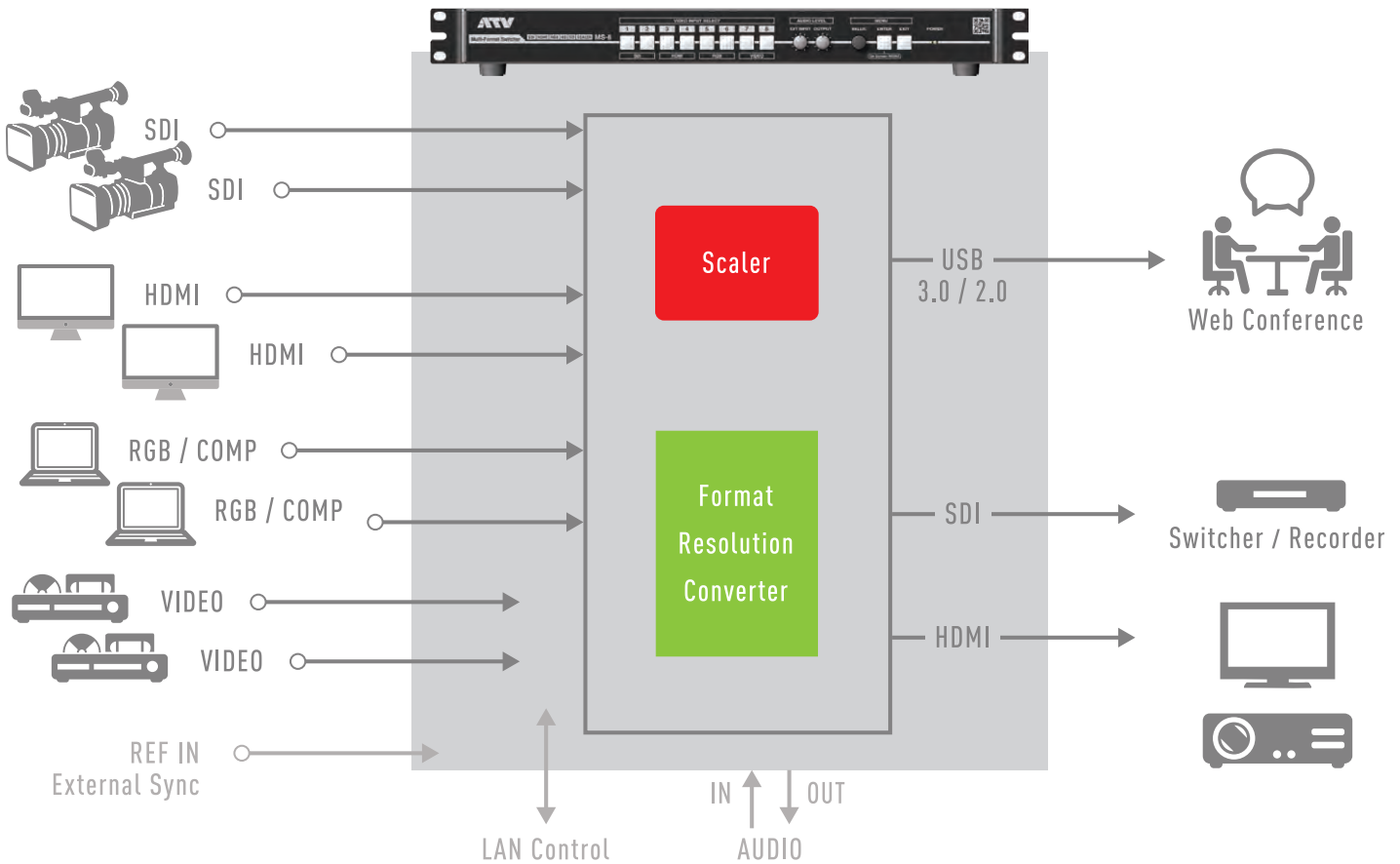# Pick a video you want to watch - anytime.

For a teleconference or a presentation, you may need to handle video outputs from PCs of different resolutions as well as audio-visual contents from cameras.

On such occasions, poor practices such as taking an inordinately long time to connect/disconnect cables or failure to show an intended video promptly could give a negative impression to, for example, business partners or potential customers. MS-8, a simple switcher equipped with the same built-in scaler as an A-PRO-4, can eliminate such potential situations.
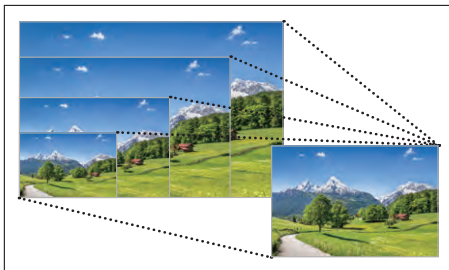
All you have to do is to connect all the video sources to the MS-8 unit and then you can switch between them just by pressing respective buttons as needed. Even if connected video sources are of heterogeneous formats, the built-in scaler optimally manages them to present all the visual contents. The unit is equipped with two-channel stereo inputs for external audio input. The USB terminals can output streams for live video streaming.

SDI

SDI

HDMI

HDMI

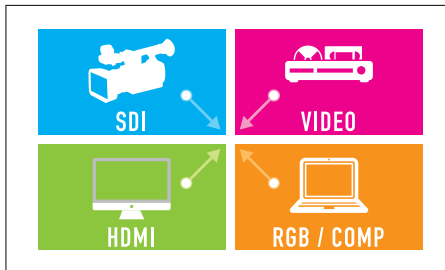RGB / COMP

RGB / COMP

VIDEO

VIDEO

REF IN
External Sync

Scaler

Format
Resolution
Converter

USB
3.0 / 2.0

SDI

HDMI

Web Conference

Switcher / Recorder

IN　　OUT

LAN Control　　AUDIO

Multi-format support

The built-in scaler converts all video input signals into an optimal format.

Diverse input terminals

Two inputs are provided for SDI, HDMI, analog RGB, analog and composite connectivity, respectively.

USB 3.0 output

USB 3.0 terminals are ready for high-definition video and audio stream output suited for live streaming.
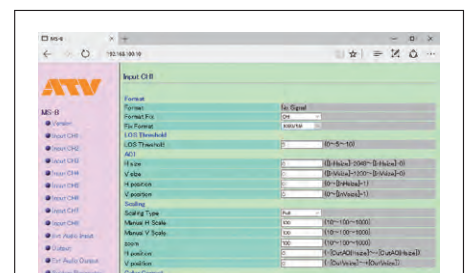

10-bit/4:4:4 processing for up to 2K/60P

Resolutions up to 2048x1080/60P are supported for video input.Processing at 10-bit/4:4:4 realizes clear video output with no color bleeding.

External synchronization support

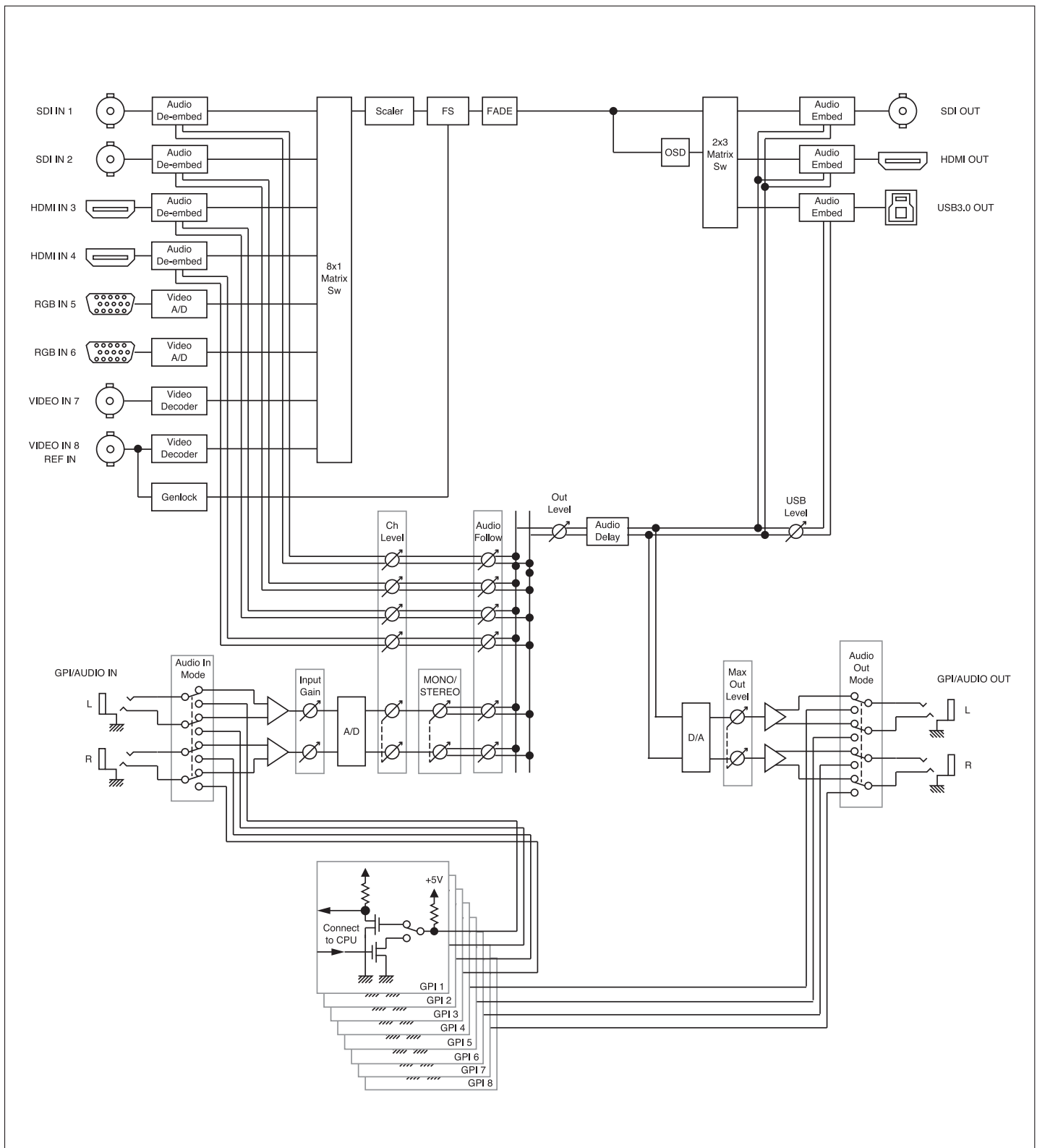The unit can be integrated into an existing system as a sub-switcher via a reference input.

Supporting a wide range of external controls

You can modify parameters through a web browser interface on your PC/Mac. GPI IN/OUT is also supported.

MS-8   BLOCK DIAGRAM

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

MS-8   SPECIFICATION

Input Connectors : SDI IN

Connector	BNC type x 2
Signal Standards	SMPTE ST2081 SMPTE ST424 (SMPTE ST425-AB) SMPTE ST292 SMPTE ST259-C
Video Format	2048x1080/60p/59.94p/50p/48p/47.95p/30p/29.97p/25p/24p/23.98p/
	30PsF/29.97PsF/25PsF/24PsF/23.98PsF (Conforms to SMPTE ST2048)
	1920x1080/60p/59.94p/50p/30p/29.97p/25p/24p/23.98p/
	60i/59.94i/50i/30PsF/29.97PsF/25PsF/24PsF/23.98PsF (Conforms to SMPTE ST274)
	1280x720/60p/59.94p/50p/30p/29.97p/25p/24p/23.98p (Conforms to SMPTE ST296)
	720x480/59.94i, 720x576/50i (Conforms to BT.656-3/5)
Color Format	10 bits YCC4:2:2, 12 bits YCC/RGB4:4:4, 10 bits RGBA/YCCA4:4:4:4, 12 bits YCCA4:2:2:4
Audio Format	Linear PCM, 24/20 bits, 48 kHz, 16 ch (Conforms to SMPTE ST299, ST272-C)

Input Connectors : HDMI IN

Connector	Type A (19 pins) x 2
Signal Standards	HDMI1.4
Video Format	2048x1080/60p/59.94p/50p/48p/47.95p/30p/29.97p/25p/24p/23.98p
	(SMPTE ST2048 Timings)
	1920x1080/60p/59.94p/50p/60i/59.94i/50i/30p/29.97p/25p/24p/23.98p,
	1280x720/60p/59.94p/50p,720x480/59.94p, 720x576/50p, 720(1440)x480/59.94i, 720(1440)x576/50i
	(Conforms to CEA-861-F)
	640x480/60/72/75/85, 800x600/56/60/72/75/85, 1024x768/60/70/75/85,
	1152x864/75, 1280x768/60/75/85, 1280x800/60/75/85, 1280x960/60/85,
	1280x1024/60/75/85,1360x768/60, 1400x1050/60/75, 1440x900/60/75/85, 1600x1200/60,
	1680x1050/60,1920x1200/60 Reduced Blanking(Conforms to VESA DMT)
Color Format	10/12 bits YCC4:2:2, 8/10/12 bits YCC/RGB4:4:4
Audio Format	Linear PCM, 16--24 bits, 32--48 kHz, 2--8 ch

Input Connectors : RGB COMPONENT IN

Connector	HD-15 type x 2
Signal Standards	VESA VSIS, SMPTE ST274/ST296, ITU-R BT.1358-1, EBU N10
Video Format	1920x1080/60p/59.94p/50p/60i/59.94i/50i/30PsF/29.97PsF/25PsF/24PsF/
	23.98PsF (Conforms to SMPTE ST274),
	1280x720/60p/59.94p/50p (Conforms to SMPTE ST296),
	720x480/59.94p, 720x576/50p (Conforms to ITU-R BT.1358-1),
	720x480/59.94i, 720x576/50i (Conforms to EBU N10),
	640x480/60/72/75/85, 800x600/56/60/72/75/85, 1024x768/60/70/75/85,
	1152x864/75, 1280x768/60/75/85, 1280x800/60/75/85, 1280x960/60/85,
	1280x1024/60/75/85,1360x768/60, 1400x1050/60/75, 1440x900/60/75/85, 1600x1200/60,
	1680x1050/60,1920x1200/60 Reduced Blanking (Conforms to VESA DMT)

Input Connectors : REF IN

Connector	BNC type x 1
Signal Standards	B.B. (SMPTE ST318), Bi-Level (ITU-R BT.1358-1), HD Tri-Level (SMPTE ST274, ST296)
Video Format	1920x1080/59.94p/50p/59.94i/50i (Conforms to SMPTE ST274)
	1280x720/59.94p/50p (Conforms to SMPTE ST296)
	720x480/59.94p, 720x576/50p (Conforms to ITU-R BT.1358-1)
	720x480/59.94i, 720x576/50i (Conforms to SMPTE ST318)

Input Connectors : VIDEO IN

Connector	BNC type x 2
Signal Standards	ITU-R BT.470-6
Video Format	NTSC, NTSC-J, PAL

Input Connectors : AUDIO IN

Connector	1/4" TRS phone type (balanced) x 2
Input Level	-30--+4 dBu
Maximum Input Level	+24 dBu
Impedance	150 k / 600 ohms selectable

Output Connectors : SDI OUT

Connector	BNC type x 1
Signal Standards	SMPTE ST2081 SMPTE ST424 (SMPTE ST425-AB)
	SMPTE ST292 SMPTE ST259-C
Video Format	2048x1080/59.94p/50p/29.97p/25p/24p/23.98p
	(Conforms to SMPTE ST2048)
	1920x1080/59.94p/50p/29.97p/25p/24p/23.98p/59.94i/50i
	(Conforms to SMPTE ST274)
	1280x720/59.94p/50p (Conforms to SMPTE ST296)
	720x480/59.94i, 720x576/50i (Conforms to ITU-R BT.656-5))
Color Format	10bit YCC4:2:2, 12bit YCC/RGB4:4:4 (Valid bits are 10 bits)
Audio Format	Linear PCM, 24/20 bits, 48 kHz, 2 ch
	(Conforms to SMPTE ST299, ST272-C)

Output Connectors : HDMI OUT

Connector	Type A (19 pins) x 1
Signal Standards	HDMI1.4
Video Format	2048x1080/59.94p/50p/29.97p/25p/24p/23.98p
	(SMPTE ST2048 Timings)
	1920x1080/59.94p/50p/29.97p/25p/24p/23.98p/59.94i/50i,
	1280x720/59.94p/50p,720x480/59.94p,720x576/50p,
	720(1440)x480/59.94i, 720(1440)x576/50i (Conforms to CEA-861-F)
Color Format	10 bits YCC4:2:2, 8/10 bits YCC/RGB4:4:4
Audio Format	Linear PCM, 24 bits, 48 kHz, 2 ch

Output Connectors : USB3.0 OUT

Connector		USB Type B (Super Speed USB) x 1
Standards		USB 3.0 Super Speed (SS) / USB 2.0 High Speed (HS)
Video Format		USB Video Class 1.1, USB Audio Class 1.0
	(SS)	2048x1080/59.94p/50p/29.97p/25p/24p/23.98p,
		1920x1080/59.94p/50p/29.97p/25p/24p/23.98p/59.94i/50i,
		1280x720/59.94p/50p,720x480/59.94p, 720x576/50p,
	(HS)	720x480/59.94i, 720x576/50i
Color Format		720x480/59.94i, 720x576/50i
Audio Format		8 bits YCC4:2:2
		Linear PCM, 16 bits, 48 kHz, 2 ch

Output Connectors : AUDIO OUT

Connector	1/4" TRS phone type (balanced) x 2
Output Level	-20--+4 dBu
Max Output Level	+24 dBu
Min Load Impedance	20k ohms

Processing

Video Processing	10 bits YCC4:4:4
Audio Processing	24 bits 48 kHz

Other Connectors

USB2.0 Connector	Micro USB Type B (Hi-Speed USB) x 1
Standards	USB 2.0 High Speed (HS)
LAN Connector	RJ45 (10/100 Base-T)
DC IN	Power Voltage : 12--20 V, Power Consumption : 35 W

Others

Dimensions	16-13/16 (W) x 9 (D) x 2-3/16 (H) inches
Weight	2.7 kg, 6 lbs (without AC adaptor & AC cord & Rack mount brackets & Screws)
Operation Temperature	+0--+40 degrees Celsius, +41--+104 degrees Fahrenheit
Accessories	AC adaptor, Startup Manual,
	Rack mount brackets x 2, Screws x 6,
	Electrical power cords x 5 (for Japan, North America, UK, EU and Australia)

* 0dBu=0.775Vrms

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