IP Live Switcher with Intuitive and Compact Design Takes Online Communication One Level Higher

Broadcast-quality video in a compact, notebook-size chassis.
Supports diverse IP protocols for smooth IP-based video production and distribution

Conveniently Compact Switcher Achieves High-quality Video

The AV-HSW10 supports 10bit processing for broadcast-quality video and is also equipped with diverse functions necessary for high-quality video production, such as a frame synchronizer, Genlock, and various keyers. It also supports audio input, enabling switching between video and audio with a single unit. The AV-HSW10 takes video broadcasting to the next level, making it perfect for highly professional online lectures, corporate webinars and other live events that are gaining momentum these days.

Signal Format

3G-SDI	1080/59.94p, 50p, 29.97p, 25p, 24p, 23.98p 1080/59.94i, 50i 720/59.94p, 50p
High Bandwidth NDI®*1	1080/59.94p, 50p, 29.97p, 25p, 24p, 23.98p 720/59.94p, 50p
NDI®│HX*1	1920×1080p, 1280×720p

Diverse Interfaces to Suit Wide-ranging Needs

In addition to 3G-SDI and HDMI, the AV-HSW10 supports NDI®*1 as well as SRT and many other IP transmission standards to suit contemporary video-production needs. When combined with IP-enabled PTZ cameras, it creates a simple IP-based video production system. It also supports RTMP for direct upload to streaming services, and USB Video Class for compatibility with web conferencing services. The system can be adjusted based on the particular platform and site layout, enabling one-person operation from production to distribution.

Video Input

3G-SDI	4	3
HDMI	1	2
IP (NDI®│HX*1/SRT)	2	
IP (High Bandwidth NDI®*1)	2	

Video Output

3G-SDI	2
HDMI	1
IP (High Bandwidth NDI®*1/ SRT/RTMP)	2
USB Video Class/ USB Audio Class*2	1

Simple, Intuitive and Reliable Operation

The AV-HSW10 offers the simple, intuitive operability required in live production and ensures easy, error-free operation - all in a robust chassis design. The main unit features buttons and a fader - inspired by its predecessor, the AW-HS50, and have been enhanced for even greater operability essential for high-quality video distribution. On-screen display (OSD) also is supported.

The tactile-response crosspoint button is made of soft silicon rubber and features a concave design for extra-easy, no-look use.

The T-shaped fader is similar in feel to higher-end models.

Diverse Keyers for More Attractive Videos

Two channels of keyers can be programmed for PinP, linear, luminance or chroma key*3 enabling high-quality compositing achievable only with 10bit signal processing. Two AUX buses are also provided.

Webinar screen example with keyer

MultiViewer with 10 Selectable Patterns

MultiViewer output is provided as standard, enabling up to 16 split screens to be displayed on a single screen. Split-layout options include 4, 5 (2 patterns), 6 (2 patterns), 9, 10 (2 patterns), 12 and 16 screens.

12-split MultiViewer screen

Remote Control with Software Control Panel*4

The AV-HSW10 is compatible with Panasonic's Software Control Panel*4 for video monitoring and switching with a networked PC. MultiView images can be checked remotely to divide up production tasks for greater on-site efficiency in the field.

Software Control Panel screen (sample)

*1: NDI® is a new protocol developed by NewTek, Inc. that supports IP video production workflow. NDI® is a registered trademark of NewTek, Inc. in the United States and other countries. *2: USB Video Class(UVC): A standard for connecting video-handling devices such as webcams to a computer via USB. USB Audio Class(UAC): A standard for connecting audio-handling devices to a computer via USB. *3: Chroma key can only be selected from keyer 1. *4: Future support scheduled.
Note: Product images shown are CG images. Screen examples for illustration purpose only. Information subject to change without notice.
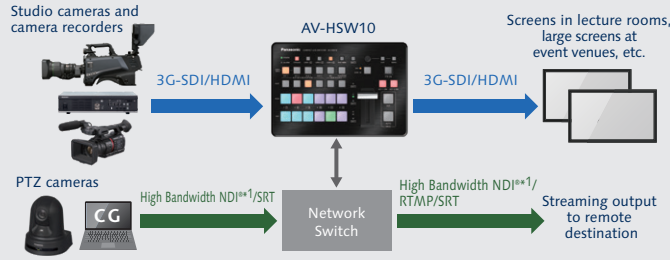
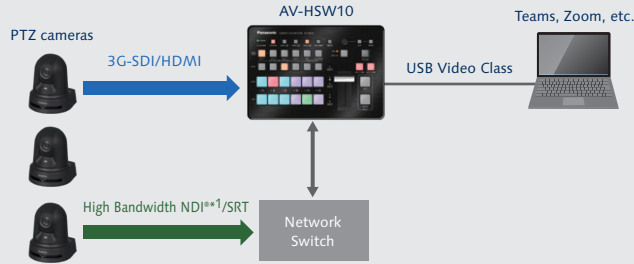Note: CG image

System Examples

Ex.1 Lecture or live event

For hybrid, in-person and online events, large-screen video at the venue can be output via 3G-SDI or HDMI and easily broadcast to remote locations via IP.

Studio cameras and camera recorders
AV-HSW10
Screens in lecture rooms, large screens at event venues, etc.
3G-SDI/HDMI
3G-SDI/HDMI

PTZ cameras
CG
High Bandwidth NDI®*1/SRT
Network Switch
High Bandwidth NDI®*1/RTMP/SRT
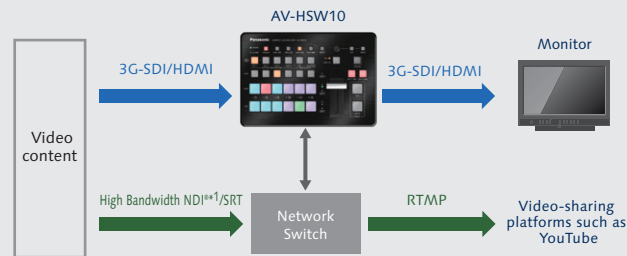Streaming output to remote destination

Ex.2 Webinar or teleconference

USB Video Class is supported for streaming to a web conferencing service, such as Teams or Zoom, without having to install a special driver on the PC.

PTZ cameras
AV-HSW10
Teams, Zoom, etc.
3G-SDI/HDMI
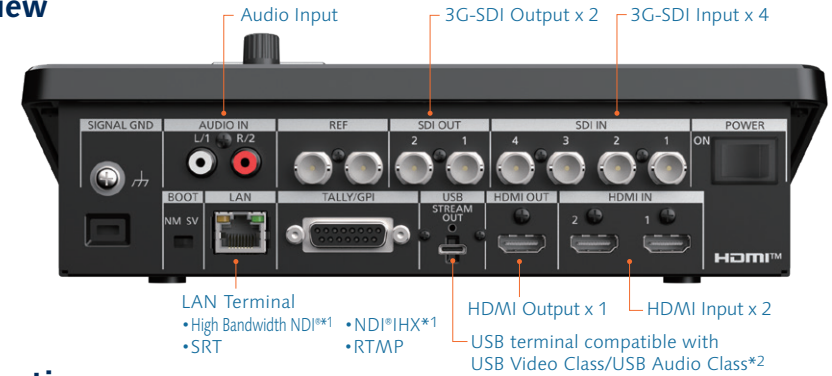USB Video Class

High Bandwidth NDI®*1/SRT
Network Switch

Ex.3 Video streaming

The AV-HSW10, also a great option for broadcasting prerecorded video, supports RTMP for direct uploading to video-sharing platforms such as YouTube.

Video content
AV-HSW10
Monitor
3G-SDI/HDMI
3G-SDI/HDMI

High Bandwidth NDI®*1/SRT
Network Switch
RTMP
Video-sharing platforms such as YouTube

Rear View

Audio Input
3G-SDI Output x 2
3G-SDI Input x 4

SIGNAL GND
AUDIO IN L/1 R/2
REF
SDI OUT 2 1
SDI IN 4 3 2 1
POWER ON

BOOT NM SV
LAN
TALLY/GPI
USB STREAM OUT
HDMI OUT
HDMI IN 2 1
HDMI™

LAN Terminal
• High Bandwidth NDI®*1
• SRT
• NDI®IHX*1
• RTMP
HDMI Output x 1
HDMI Input x 2
USB terminal compatible with USB Video Class/USB Audio Class*2

Specifications

Video Input	3G-SDI	4	3
	HDMI	1	2
	SRT/NDI®|HX*1	2	
	High Bandwidth NDI®*1	2	
Video Output	3G-SDI	2	
	HDMI	1	
	High Bandwidth NDI®*1/SRT/RTMP	2	
	USB Video Class/USB Audio Class*2	USB3.2 Gen.1 Type-C, 1ch No BUS Power YUY2 (Uncompressed)	
Video Format	3G-SDI	1080/59.94p, 50p, 29.97p, 25p, 24p, 23.98p 1080/59.94i, 50i, 720/59.94p, 50p	
	High Bandwidth NDI®*1	1080/59.94p, 50p, 29.97p, 25p, 24p, 23.98p 720/59.94p, 50p	
	NDI®|HX*1	1920 × 1080p, 1280 × 720p	
Audio		IN: RCA x 2, OUT: Φ3.5 mm TRS	

Frame Synchronizer	All inputs
CC/UC/DC (Input)	i/P converter, DC/UC (1080-720p), CC
Keyer	2 (PinP, Linear key, Luminance key, Chroma key*3)
AUX	2
Genlock	BB or Tri-level (Input/through output)
PTZ Link	RP Link (AW-RP60/ RP150), TSL5.0
VMEM	Still x 2
Shot MEM	Max. 12 presets
USB	USB2.0 Type-A (for USB Memory) BUS Power
Dimensions (W x H x D) (excluding protrusions)	254 mm x 175 mm x 67 mm (10 inches x 6-7/8 inches x 2-5/8 inches)
Power Consumption	45 W (TBD)

Dimensions
Unit : mm (inches)

254 (10)
(10°)
67 (2-5/8)
2.5 (1/8)
175 (6-7/8)
37 (1-7/16)

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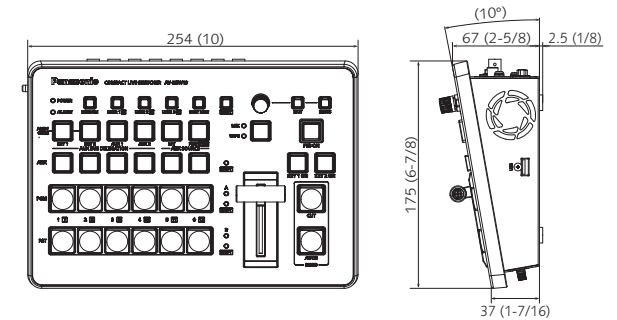
For more information, please visit Panasonic web site
https://pro-av.panasonic.net/en/products/av-hsw10/

Specifications are subject to change without notice.

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