Panasonic
CONNECT

**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
NDI®*1*2	1080/59.94p,50p,29.97p,25p,24p,23.98p 720/59.94p,50p
NDI®|HX*1*2	1920×1080p,1280×720p

Diverse Interfaces to Suit Wide-ranging Needs

In addition to 3G-SDI and HDMI, the AV-HSW10 supports NDI®*1*2 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

	Baseband mode		IP mode
3G-SDI	4	3	1
HDMI	1	2	1
IP (NDI®*1*2/ NDI®|HX*1*2/SRT)	2		3*3

Video Output

3G-SDI	2
HDMI	1
IP (NDI®*1*2/SRT/ RTMP)	2
USB Video Class	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*4 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*5

The AV-HSW10 is compatible with Panasonic's Software Control Panel*5 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. In this instance, NDI® is used to indicate low latency with high bandwidth NDI®, NDI®|HX is used to indicate high efficiency low bandwidth NDI®|HX. *2: Requires a separate license (paid option). Please contact Panasonic sales representative for details. *3: NDI®|HX and SRT have a maximum of 2 inputs. *4: Chroma key can only be selected from keyer 1. *5: Future support scheduled. Note: Product images shown are CG images. Screen examples for illustration purpose only. Information subject to change without notice.
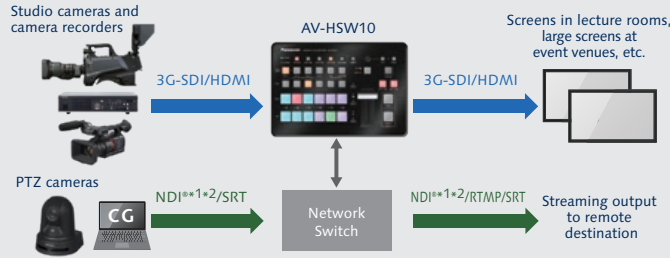
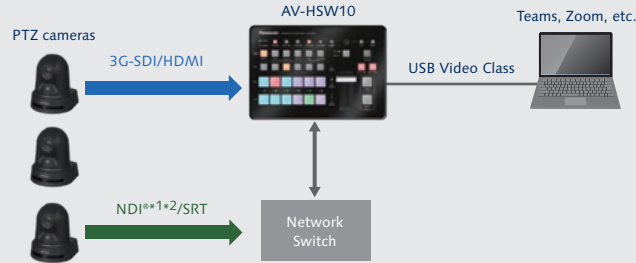Note: CG image

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 → 3G-SDI/HDMI → AV-HSW10 → 3G-SDI/HDMI → Screens in lecture rooms, large screens at event venues, etc.

PTZ cameras / CG → NDI®*1*2/SRT → Network Switch → NDI®*1*2/RTMP/SRT → Streaming output to remote destination
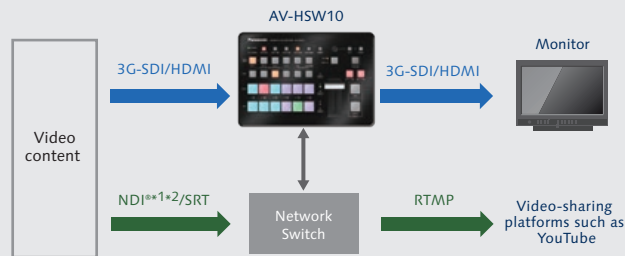
Ex.2 Webinar or teleconference

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 → 3G-SDI/HDMI → AV-HSW10 → USB Video Class → Teams, Zoom, etc.
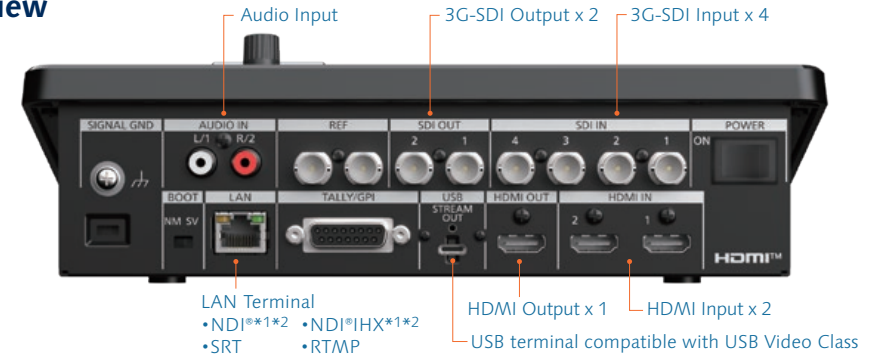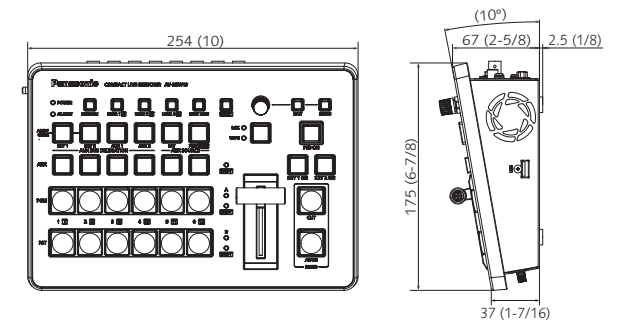
NDI®*1*2/SRT → Network Switch

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 → 3G-SDI/HDMI → AV-HSW10 → 3G-SDI/HDMI → Monitor

NDI®*1*2/SRT → Network Switch → RTMP → Video-sharing platforms such as YouTube

Rear View

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

LAN Terminal
• NDI®*1*2 • NDI®|HX*1*2
• SRT • RTMP

USB terminal compatible with USB Video Class

HDMI Output x 1 • HDMI Input x 2

Specifications

		Baseband mode	IP mode
Video Input	3G-SDI	4 or 3	1
	HDMI	1 or 2	1
	NDI®*1*2/Streaming	2	3
Video Output	3G-SDI	2	2
	HDMI	1	1
	NDI®*1*2/Streaming	2	2
Video Format	3G-SDI	1080/59.94p,50p,29.97p,25p,24p,23.98p 1080/59.94i,50i 720/59.94p,50p	
	NDI®*1*2	1080/59.94p,50p,29.97p,25p,24p,23.98p 720/59.94p,50p	
	NDI®|HX*1*2	1920 x 1080p, 1280 x 720p	
Audio		IN: RCA x 2, OUT: Φ3.5 mm TRS	
Frame Synchronizer		All inputs	
CC/UC/DC		i/P converter, DC/UC (1080-720P), CC	

Keyer	2 (PinP, Linear key, Luminance key, Chroma key)
AUX	2
USB Video Class Output	USB Type-C, 1ch
Genlock	BB or Tri-level (Input/through output)
PTZ Link	Switcher Link, TSL5.0
VMEM	Still x 2
Shot MEM	Max. 12 presets
USB	USB-Type A x 1 (USB Memory)
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) — 67 (2-5/8) 2.5 (1/8) — (10°)
175 (6-7/8) — 37 (1-7/16)

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

Specifications are subject to change without notice.

SP-HSW10WEB 202303U