

AV-HSW10 Compact Live Switcher

IP Live Switcher with Intuitive, Compact Design For High-quality Video Streaming 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. SDI input/ output allows transmission at a minimum of 1H (when Genlock is used) or 1 frame + 1H (when frame synchronizer is used) facilitating stable video transmission with low latency. 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.

Auto Color Adjustment for Multi-camera Videos

The Auto Color Adjustment function automatically adjusts the color tone of videos captured from multiple cameras to match the color tone of the selected camera. The color tone of videos recorded and distributed using multiple cameras tends to vary from one camera to another, and this simple system can be used to equalize this.



Check out the video

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

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.

NDI®*1 signal with Alpha Channel for CG Materials

Supports NDI®*1 input signal with alpha channel,*2 allowing CG materials with transparency information (alpha channels) to be input directly from a PC via a single LAN cable. This facilitates flexible operation, such as the easy editing of materials during an event.

PTZ Camera Linkages (RP Link,*4 etc.)

The AW-RP150/60 Remote Camera Controller can be connected to

up to nine PTZ cameras. Using an IP connection, camera selection

(External Control AUX Panel) and the tally of each PTZ camera can

eliminates the need for additional monitors to check camera output

can be synchronized with the main unit's AUX output switching

be managed from the unit (Tally Link). This streamlined setup



Check out the video

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 no-look use. The T-shaped fader is similar in feel to higher-end models.



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

*1: NDI® is a registered trademark of Vizrt NDI AB in the United States and other countries. *2: NDI® High Bandwidth input is required when using NDI® input signal with alpha channel. *3: Chroma key can only be selected from keyer 1.

or tally transmission devices.

*4: Refers to both "External Control Switcher" and "External Control AUX Panel'

Note: Screen examples for illustration purpose only. Information subject to change without notice.

AV-HSW10 actual size

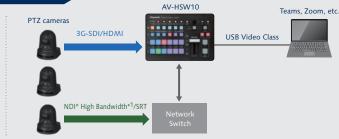


System Examples

Ex.1 Lecture or live event Studio cameras and For hybrid, in-person and camera recorders Screens in lecture rooms AV-HSW10 large screens at online events, large-screen event venues, etc. -----3G-SDI x 4 or 3 3G-SDI x 2 video at the venue can be HDMI x 1 or 2 HDMI x 1 output via 3G-SDI or HDMI and easily broadcast to remote locations via IP. PTZ cameras SRT/NDI® HX*1 x 2 In addition, supporting NDI[®] High Bandwidth/ RT/MP/SRT Streaming output NDI^{®*1} input signal with to remote NDI® High Bandwidth*1 x 2 CG materials (NDI* input signal with alpha channel supported)*2 destination alpha channel facilitates CG the use of CG materials.

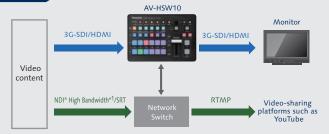
Ex.2 Webinar or teleconference

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.





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



AV-SF10 Software Control Panel (free software

The AV-SF10 Software Control Panel allows a networked PC or tablet (Windows or MacOS) connected to the AV-HSW10 main unit to be used for diverse operations and configurations. The GUI screen integrates Panasonic's unique MultiViewer and control panel for intuitive operation. Combining the main unit and a PC or tablet loaded with the Software Control Panel enables work sharing and remote operation in the field location.





Main Mode



Specifications

Video Input	3G-SDI	4	3
	HDMI	1	2
	SRT/NDI® HX*1	2	
	NDI [®] High Bandwidth*1	2 (Alpha channels supported)	
Video Output	3G-SDI	2	
	HDMI	1	
	NDI® High Bandwidth*1/ SRT/RTMP	2	
	USB Video Class/ USB Audio Class* ³		
Video Format	3G-SDI	1080/59.94p, 50p, 29.97p, 25p, 24p, 23.98p 1080/59.94i, 50i, 720/59.94p, 50p	
	NDI [®] High Bandwidth* ¹	1080/59.94p, 50p, 29.97p, 25p, 24p, 23.98p 720/59.94p, 50p	
	NDI® HX*1	1080/60fps, 50fps, 30fps, 25fps, 24fps 720p/60fps,50fps	

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*4)	
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	48 W	

*1: NDI® is a registered trademark of Vizrt NDI AB in the United States and other countries. *2: NDI® High Bandwidth input is required when using NDI® input signal with alpha channel. *3: USB Video Class(UVC): A standard for connecting video-handling devices such as webcams to a computer via USB. USB Audio Class(UVC): A standard for connecting audio-handling devices to a computer via USB. *4: Chroma key can only be selected from keyer 1.

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