

## HD/SD Switcher with 16 SDI inputs, 4 SDI outputs, and Dual-screen MultiViewer with 2 DVI outputs



**AV-HS450**

The AV-HS450 switcher provides great power for creative video production at a very affordable price. The standard configuration of this compact, expandable HD/SD video switcher includes: 16 HD/SD-SDI inputs, four HD/SD-SDI outputs, two DVI outputs, dual 3D DVE functions, one upstream keyer with luminance or chroma key functionality, two downstream keyers, dual channel PinP, and four independent Aux busses.

### Compact design & a versatile input and output options

The AV-HS450 is equipped with 16 HD/SD-SDI inputs as standard in its compact 2RU mainframe size, and all inputs feature a built-in 10-bit frame synchronizer. It is also embedded with 4 up-converters and 8 color correctors. In addition to the standard 4 HD/SD-SDI outputs and 2 DVI-D outputs and 16 SDI inputs, optional expansion boards support analog component, analog composite, and DVI inputs, as well as analog component and scaled DVI outputs. The AV-HS450 offers a truly flexible and versatile system architecture.

### Multi-format HD/SD compatibility

**HD** 1080/59.94i,50i,23.98psF\*,24psF\*  
720/59.94p,50p

**SD** 480/59.94i,576/50i

\* AV-HS04 M1, M2, M3, M4, M5, M6 and M7 optional boards are not compatible.

### Optional input and output boards provide great flexibility

You can have up to 20 inputs by inserting 2 optional input boards or up to 10 outputs by inserting 2 optional output boards into the 2 input/output optional board slots.



**Full-HD DVI Input board  
AV-HS04M8**  
2 DVI-D inputs (up to WUXGA resolution)

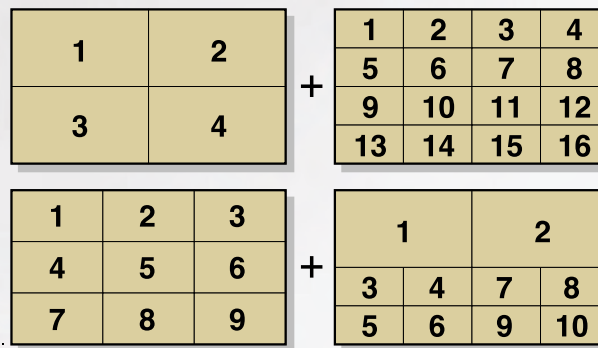


**Mainframe**

# Built-in dual-monitor MultiViewer displays up to 20 images on two screens

A dual-display MultiViewer with up to 20 windows is provided as standard equipment with every AV-HS450.

This exclusive feature can save space, reduce equipment costs, and improve production workflow.



You can split your screens into 4, 9, 10, and 16 sections.  
A maximum of 20 channels may be simultaneously displayed on 2 screens.

## Enhanced functions and value

- Shot memory and P in P memory for streamlined operations
- Dedicated hardware for two DSK and two P in P channels is standard equipment
- Built-in switchable frame synchronizers on every input, and compatibly with external synchronization systems
- Dual, redundant power supply as standard equipment
- Flexible pan-tilt system control via RS-422
- Four AUX busses with MIX transitions to AUX 1, for flexible production workflow

### ■ AV-HS450 main specifications

#### • Mainframe

Video format	HD (1080/59.94i, 1080/50i, 1080/23.98psF*, 1080/24psF*, 720/59.94p, 720/50p) SD (480/59.94i, 576/50i) * AV-HS04 M1, M2, M3, M4, M5, M6 and M7 optional boards are not compatible.	AUX Bus	1-4 * AUX BUS1 is compatible with MIX transition
Video processing	Y:Cb:Cr,4:2:2 10 bit (8 bit for FMEM) RGB,4:4:4 8 bit	Input function	Frame Synchronizer IN 1 to 16 Freeze IN 1 to 16 Up-converter IN 13 to 16 Color collector IN 9 to 16 * Specifications for IN A1, A2, B1, and B2 depend on the specs of the mounted optional equipment.
M/E	1 M/E	Output function	Multi-viewer 2 systems Labels, tally indication, split-screen (the screen may be split into 4, 9, 10 and 16 sections) * A maximum of 20 channels may be simultaneously displayed on 2 screens
Video Input	A maximum of 20 input channels Standard: 16 SDI inputs (IN 1 to 16) Optional: Maximum of 4 inputs (IN A1, A2, B1, B2) (Up to 2 optional boards may be inserted into the 2 input/output optional slots)	Other function	OSD, phase adjustment, chroma key sample marker
Video Output	A maximum of 10 output channels Standard: 4 SDI outputs (OUT 1 to 4 each, 2 output distribution for OUT1) Option: Maximum of 4 outputs (OUT A1, A2, B1, B2) (Up to 2 optional boards may be inserted into the 2 input/output optional slots) Standard: 2 DVI-D outputs (OUT5, OUT6)* XGA (1024 x 768), WXGA (1280 x 768), SXGA (1280 x 1024), WSXGA+ (1680 x 1050), UXGA (1600 x 1200), WUXGA (1920 x 1200) Vertical frequency: 60 Hz 1080/50p, 1080/59.94p * Does not support analog outputs	Memory function	Shot memory, BKGD/wipe memory, PinP memory
Reference input/output	GENLOCK: Black burst or TRI input signal (loop through inputs) Internal synchronization: Black burst outputs	Interface	PANEL RJ45 x 1 (to connect to the control panel) EDITOR D-sub 9 pin x 1, RS-422 (GVG protocol compatible) COM D-sub 9 pin x 1, pan-tilt system control TALLY/GPI D-sub 50 pin x 1 LAN RJ45 x 1
BKGD	WIPE/DVE pattern Wipe, squeeze, slide, 3D, 2 channel DVE pattern Transition type Cut, mix, wipe (including DVE) Image Image effect: PGM/A, PST/B BUS Effect: Mosaic, mono color, paint	Power supply/ Power consumption (TBD)	AC 100 V to 240 V, 50 Hz/60 Hz, 170 W
KEYER	Number of keys 1 Key type Linear key, luminance key, chroma key, full key Transition type Cut, mix, wipe WIPE/DVE pattern Wipe, squeeze, slide, 3D pattern	Operating temperature	0 °C to +40 °C (32 °F to 104 °F)
DSK	Number of keys 2 Key type Linear key, luminance key Transition type MIX	Operating humidity	10 % to 90 % (no condensation)
PinP	Number of PinP 2 Transition type MIX	Dimensions (W x H x D) (TBD)	(2RU) 482 mm x 88 mm x 471 mm (19 " x 3-1/2 " x 18-1/2 ") (excluding protrusions)
		Weight (TBD)	Approx. 10.5 kg (23.1 lbs) (without options/excluding accessories) Approx. 11.0 kg (24.3 lbs) (with full options/excluding accessories)
		<b>• Control panel</b>	
		Interface	Mainframe RJ45 x 1 (to connect to the mainframe) TALLY/GPI D-sub 25 pin x 1
		Removable media	SD memory card Still image file loading/saving, setup data back up
		Operating temperature	0 °C to +40 °C (32 °F to 104 °F)
		Operating humidity	10 % to 90 % (no condensation)
		Power supply/ Power consumption (TBD)	DC 12V 2A, 24 W (comes with an AC adapter)
		Dimensions (W x H x D) (TBD)	560 mm x 88 mm x 300 mm (22 " x 3-1/2 " x 11-13/16 ") (excluding protrusions)
		Weight (TBD)	Approx. 4.0 kg (8.8 lbs) (excluding accessories)

This brochure is preliminary. Specifications and functions are subject to change without notice.



Panasonic Broadcast & Television Systems Company

3 Panasonic Way, 4E-7, Secaucus, NJ 07094

(201) 348-5300

www.panasonic.com/broadcast

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