

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)



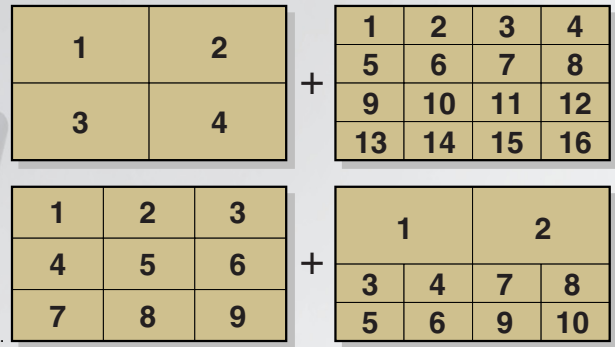
Mainframe

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, and AUX 1 is equipped with MIX transition for flexible production workflow

AV-HS450 main specifications

Mainframe

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|------------------------|---|
| 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. |
| Video processing | Y:Cb:Cr,4:2:2 10 bit (8 bit for FMEM) RGB,4:4:4 8 bit |
| M/E | 1 M/E |
| 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) |
| 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 |
| Reference input/output | GENLOCK: Black burst or TR1 input signal (loop through inputs) Internal synchronization: Black burst outputs |
| BKGD | Wipe/DVE pattern: Wipe, Squeeze, Slide, 3D, 2 channel DVE pattern Transition type: Cut, Mix, Wipe (including DVE) Image effect: PGM/A, PST/B BUS Effect: Mosaic, Defocus, Mono color, Paint |
| 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 |
| DSK | Number of keys: 2 Key type: Linear key, Luminance key Transition type: Mix |
| PinP | Number of PinP: 2 Transition type: Mix |

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| AUX BUS | 1-4 * AUX BUS1 is compatible with MIX transition |
| 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 |
| 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 |
| | Other function: OSD, Phase adjustment, Chroma key sample marker |
| Memory function | Shot memory, BKGD/Wipe memory, PinP memory |
| 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 |
| Power supply/Power consumption (TBD) | AC 220 V to 240 V, 50 Hz/60 Hz 120 W |
| Operating temperature | 0 °C to +40 °C |
| Operating humidity | 10 % to 90 % (no condensation) |
| Dimensions (W x H x D) (TBD) | (2RU) 482 mm x 88 mm x 471 mm (excluding protrusions) |
| Weight (TBD) | Approx. 10.5 kg (without options/excluding accessories) Approx. 11.0 kg (with full options/excluding accessories) |

Control panel

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| 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 |
| Operating humidity | 10 % to 90 % (no condensation) |
| Power supply/Power consumption (TBD) | DC 12 V, 0.8 A 9.6 W (comes with an AC adapter) |
| Dimensions (W x H x D) (TBD) | 560 mm x 88 mm x 300 mm (excluding protrusions) |
| Weight (TBD) | Approx. 4.0 kg (excluding accessories) |

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

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