

HD/SD Portable Video Switcher

HVS-300HS/300RPS



HVS-300OU: Operation Unit



HVS-300HS: Main Unit



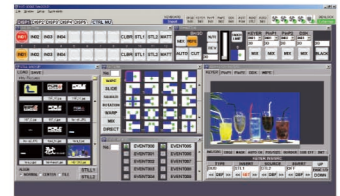
HVS-300RPS: Redundant Power Supply Model



HVS-30FP: Front Control Unit for HVS-300HS



HVS-30RU: Remote Control Unit



HVS-30GUI: PC Control Software

The HVS-300HS is the newest addition to FOR-A's popular Hanabi series and represents one of the most powerful, compact, broadcast level switchers on the market. Although small, its 1 Rack Unit main frame is packed with features including; Frame synchronizing and re-sizing engine on every channel which allow any Standard Definition equipment to be used in full HD mode. It also has plenty of wipe patterns including 2D and 3D DVE transitions. The base unit also has keyer with chroma key, DSK, Dual picture in picture, 16-channel Multi Viewer, Still Stores and much more. It is perfectly suited for a wide-range of applications including studio production, event and sports coverage, news, live staging and corporate use.

- Very compact main unit (1RU high)
- The HVS-300RPS model has in addition a redundant power supply installed in a 2RU frame.
- 4 types of control panels: standard panel, front panel, remote panel, and control GUI
- HD/SD-SDI 4 input/4 output standard, Max. 12 input/8 output
- Frame sync, re-sizing engine, and Proc Amp on each input
- Variety of I/O options: HD/SD-SDI, DVI-D, VGA, HD/SD analog component, and analog composite

- Built-in 16-split multiviewer, supporting 4, 10 or 16-split view with tally and title display
- Dual Picture-in-Picture function
- Up-stream Keyer (with Chroma Key) and DSK both with 2D DVE
- Various 2D and 3D DVE transitions
- Over 100 wipe patterns
- Two channels of still stores
- Aux remote control (option)

HVS-300HS Options

HVS-30HSDI: HD/SD-SDI Input Card

The optional HD/SD-SDI input card provides 4 extra inputs.

HVS-30HSAI: Analog Video Input Card

The analog input card provides 2 analog inputs. These can be set up as composite, component or one of each.

HVS-30PCIN: PC (DVI/VGA) Input Card

For computer-based applications we have an input card with one DVI-D and one VGA connector with resolutions ranging from VGA to WUXGA.

HVS-AUX8 / HVS-AUX16: AUX Remote Panel

We have optional AUX remote panels with either 8 or 16 buttons. The 8-button panel is half a rack wide, and the 16-button panel is of a full rack width.

HVS-30ED: Editor Interface Software

This software option provides option provides support for BVS-3000 and GVG-100 editing protocols.

HVS-30HSDO: HD/SD-SDI Output Card

The optional HD/SD-SDI output card provides 2 additional outputs. The HD/SD-SDI output cards have a 3rd down-converted SD output as well.

HVS-30HSAO: Analog Video Output Card

The analog output card provides 2 analog outputs. These can be set up as composite, component or one of each. Of course the composite output is down converted in HD mode.

HVS-30PCO: PC (DVI/VGA) Output Card

For computer-based applications we have an output card with one DVI-D and one VGA connector with resolutions ranging from VGA to WUXGA.

HVS-TALOC20/32: Tally Interface Unit

Tally Interface with power supply. There are 2 types available for Open Collector with choices of 20 or 32 contacts respectively.

-HVS-TALOC20: Open Collector system with 20 contacts

-HVS-TALOC32: Open Collector system with 32 contacts

HVS-TALR20/32: Tally Interface Unit

Tally Interface with power supply. There are 2 types available for Relay systems with choices of 20 or 32 contacts respectively.

-HVS-TALR20: Relay system with 20 contacts

-HVS-TALR32: Relay system with 32 contacts

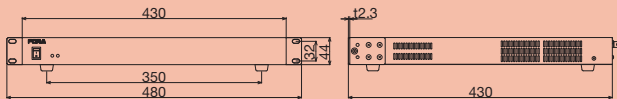
Specifications

	HD mode	SD mode
Standards	1080/60i, 1080/59.94i, 1080/50i, 1080/24PsF, 1080/23.98PsF, 720/60p, 720/59.94p, 720/50p (selectable at menu)	525/60 (NTSC), 625/50 (PAL) (selectable at menu)
Processing	4:2:2:4, 10-bit, digital component	
Quantization	Y: 10-bit, C: 10-bit, KEY: 10-bit	
Video Inputs	HD-SDI: 1.485Gbps or 1.485/1.001Gbps, or SD-SDI: 270Mbps, 75Ω, 4ea., BNC	SD-SDI: 270Mbps, 75Ω, 4ea., BNC
Video Inputs (Option)	HD-SDI: 1.485Gbps or 1.485/1.001Gbps, or SD-SDI: 270Mbps, 75Ω, BNC	SD-SDI: 270Mbps, 75Ω, BNC
	DVI: DVI-D connector, Resolution (XGA - WUXGA) (HDCP incompatible)	DVI: DVI-D connector, Resolution (VGA - XGA) (HDCP Incompatible)
	VGA: 15-pin D-sub (female), Resolution (XGA - WUXGA), R/G/B: 0.7Vp-p, H/V: TTL	VGA: 15-pin D-sub (female), Resolution (VGA - XGA), R/G/B: 0.7Vp-p, H/V: TTL
	HD analog component: Y: 1.0Vp-p, Pb/Pr: 0.7Vp-p, 75Ω, BNC	SD Analog component: Y: 1.0Vp-p, R-Y/B-Y: 0.7Vp-p, 75Ω, BNC
	SD analog component: Y: 1.0Vp-p, R-Y/B-Y: 0.7Vp-p, 75Ω, BNC	Analog composite: 1.0Vp-p, 75Ω, BNC
Reference Inputs	BB: NTSC: 0.429Vp-p/PAL: 0.45Vp-p; or Tri-level sync: ±0.3Vp-p, 75Ω or loopthrough, 1ea., BNC	BB: NTSC: 0.429Vp-p/PAL: 0.45Vp-p, 75Ω or loopthrough, 1ea., BNC
Video Outputs	HD-SDI: 1.485Gbps or 1.485/1.001Gbps, 75Ω, 4ea., BNC (PGM x 2, AUX x 2)	SD-SDI: 270Mbps, 75Ω, 4ea., BNC (PGM x 2, AUX x 2)
Video Outputs (Option)	HD-SDI: 1.485Gbps or 1.485/1.001Gbps, 75Ω, BNC	SD-SDI: 270Mbps, 75Ω, BNC
	HD Analog component: Y: 1.0Vp-p, Pb/Pr: 0.7Vp-p, 75Ω, BNC	SD Analog component: Y: 1.0Vp-p, R-Y/B-Y: 0.7Vp-p, 75Ω, BNC
	DVI: DVI-D connector, Resolution (SXGA - WUXGA) (HDCP incompatible)	DVI: DVI-D connector, Resolution (SVGA) (HDCP Incompatible)
	VGA: 15-pin D-sub (female), Resolution (SXGA - WUXGA), R/G/B: 0.7Vp-p, H/V: TTL	VGA: 15-pin D-sub (female), Resolution (SVGA), R/G/B: 0.7Vp-p, H/V: TTL
Reference Outputs	BB: NTSC: 0.429Vp-p/PAL: 0.45Vp-p; or Tri-level sync: ±0.3Vp-p, 75Ω, 1ea., BNC	BB: NTSC: 0.429Vp-p/PAL: 0.45Vp-p, 75Ω, 1ea., BNC
I/O Delay	1H (minimum delay) 1 frame - 2 frame + 1H (Using frame synchronizer or Input re-sizing engine) 2 frame - 3 frame + 1H (Using frame synchronizer or Input re-sizing engine + DVE) 3 frame - 4 frame + 1H (Using frame synchronizer or Input re-sizing engine + Output re-sizing engine + DVE)	
Multi Viewer	Screen display type: Quad, 10-Split, 16-Split Title Display (up to 8 alphanumeric characters for each input), On-Air tally indication (red/green) Delay: 1 frame relative to PGM output	
Backup Device	USB memory device	
Interfaces	EDITOR: 1ea., 9-pin D-sub (female) RS-422: 1ea., 9-pin D-sub (female) GPI IN/TALLY: 1ea., 15-pin D-sub (female) (12 in/outputs) ARCNET: 1ea., 75Ω or loopthrough, BNC Ethernet: 10/100Base-T, 1ea., RJ-45	
Temperature / Humidity	0°C - 40°C / 30% - 90% (no condensation)	
Power / Consumption	HVS-300HS: 100VAC - 240VAC ±10%, 50/60Hz / Max. 220VA (211W) HVS-300RPS: 100VAC - 240VAC ±10%, 50/60Hz / Max. 226VA (224W) HVS-300HS + HVS-30FP: 100VAC - 240VAC ±10%, 50/60Hz / Max. 242VA (216W) HVS-30OU: 100VAC - 240VAC ±10%, 50/60Hz / 33VA (16W) HVS-30RU: 100VAC - 240VAC ±10%, 50/60Hz / 13VA (5W)	
Dimensions / Weight	HVS-300HS: 430 (W) x 44 (H) x 430 (D) mm / Approx. 8kg (full option: 10kg) HVS-300RPS: 430 (W) x 88 (H) x 430 (D) mm / Approx. 9kg (full option: 11kg)> HVS-300HS+HVS-30FP: 430 (W) x 44 (H) x 446 (D) mm / Approx. 9kg HVS-30OU: 420 (W) x 87.2(H) x 246 (D) mm / Approx. 3kg HVS-30RU: 430 (W) x 44 (H) x 42 (D) mm / Approx. 1.5kg	
Accessories	HVS-300HS/300RPS: Operation manual, AC cord, Rack mount brackets HVS-30OU: AC adapter, AC cord retaining clips *Rack mount brackets are option HVS-30FP: None HVS-30RU: AC adapter, AC cord retaining clips, Rack mount brackets	
Options	HVS-30HSDI: HD/SD digital input card	HVS-30HSDO: HD/SD digital output card
	HVS-30HSAI: HD/SD analog input card	HVS-30HSAO: HD/SD analog output card
	HVS-30PCIN: PC input card	HVS-30PCO: PC output card
	HVS-AUX8: Aux Control Box (8-button type)	HVS-TALOC20/32: Tally open collector unit (20/32 terminal)
	HVS-AUX16: Aux Control Box (16-button type)	HVS-TALR20/32: Tally relay unit (20/32 terminal)
	HVS-30ED: Editor interface software	

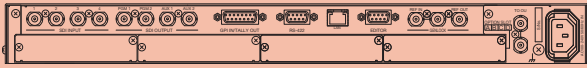
PC Requirements for HVS-30GUI

OS	Microsoft Windows XP Professional SP2 or higher Microsoft Windows Vista Home Premium or higher
CPU	Intel Pentium 4 Processor 1.2GHz or higher
Memory	512MB or more
HDD	20MB or more free space
Graphics	1280 x 768 pixels or higher resolution, 24-bit color, Graphics card with 64MB or more memory (OpenGL 1.0 or 2.0 supported)
Interfaces	Ethernet: 10Base-T/100Base-TX, 1 port

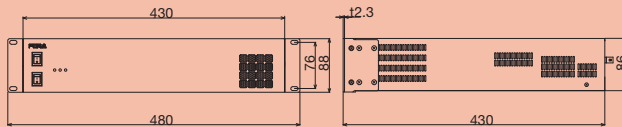
HVS-300HS External Dimensions



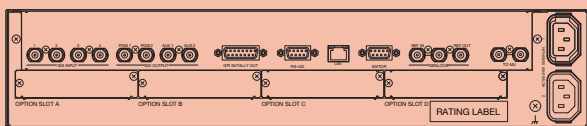
HVS-300HS Main Unit Rear Panel



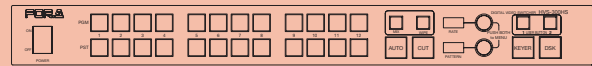
HVS-300RPS External Dimensions



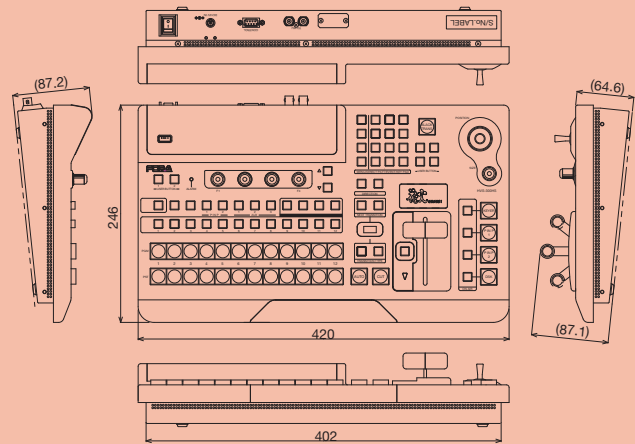
HVS-300RPS Main Unit Rear Panel



HVS-30FP Front Panel



HVS-300U External Dimensions



Block Diagram

