HVS-XT100/XT110 Specifications

	HVS-XT100	HVS-XT110
Video Formats	1080/59.94i, 1080/50i, 1080/24PsF, 1080/23.98PsF, 1080/25PsF, 1080/29.97PsF, 720/59.94p, 720/50p 1080/59.94p and 1080/50p Level A (HVS-XT100EXP3G)	
	525/60 (NTSC), 625/50 (PAL)	
Video Inputs	HD-SDI: 1.5 Gbps or SD-SDI: 270 Mbps, 75Ω, BNC x 8 (FSs on 8 inputs, resize engines on 4 inputs)	HD-SDI: 1.5 Gbps or SD-SDI: 270 Mbps, 75Ω, BNC x 12 (FSs on 8 inputs, resize engines on 4 inputs)
Video Inputs (optional)		
HVS-XT100DI-A	HD-SDI: 1.5 Gbps or SD-SDI: 270 Mbps, 75Ω, BNC x 4 (FS 4 ch, resize engines 2 ch (out of 4 inputs))	—
HVS-XT100EXP3G	3G-SDI: 3 Gbps	—
HVS-XT100AI	HD analog component, SD analog component, analog composite	—
HVS-XT100PCI	HDMI: XGA to WUXGA (1080i), XGA to SXGA (720p), VGA to XGA (SD) HDCP-incompatible at all resolutions	—
	RGB: XGA to WUXGA (1080i), XGA to SXGA (720p), VGA to XGA (SD)	—
Number of Video Inputs	Standard: HD-SDI x 8 / Max.: Refer to "I/O Expansion Card Configuration."	Standard: HD-SDI x 12
Video Outputs Video Outputs (optional)	HD-SDI: 1.5 Gbps or SD-SDI: 270 Mbps, 75Ω, BNC x 4, HDMI x 1	HD-SDI: 1.5 Gbps or SD-SDI: 270 Mbps, 75Ω, BNC x 8, HDMI x 1
HVS-XT100DO	HD-SDI: 1.5 Gbps or SD-SDI: 270 Mbps, 75Ω, BNC x 2	—
HVS-XT100EXP3G	3G-SDI: 3 Gbps	—
HVS-XT100AO	HD analog component, SD analog component, analog composite	—
HVS-XT100PCO	HDMI: SXGA to WUXGA/HDTV (1080i), SXGA to WXGA/HDTV (720p), SVGA/SDTV (SD)	—
	RGB: SXGA to WUXGA/HDTV (1080i), SXGA to WXGA/HDTV (720p), SVGA (SD)	—
Number of Video Outputs	Standard: HD-SDI x 4, HDMI x 1, Max.: Refer to "I/O Expansion Card Configuration."	Standard: HD-SDI x 8, HDMI x 1
Signal Processing	4: 2: 2: 4, digital component	
Quantization	HD/SD-SDI: 10-bit	
Effect	WIPE: 100 patterns, border and softness / 2.5D DVE: 56 patterns or more DVE WIPEs	
Transition	Available controller: Fader controller, AUTO or CUT button / Type: MIX or WIPE (DVE included)	
Still/Clip Store	2 channels (with backup feature). Each store can hold up to 227 frames of HD video	
Keyer/DSK	4 channels (KEYER x 2 + DSK x 2), includes 2D DVE that can be freely assigned An advanced, high quality Chroma keyer can be assigned to any one of the two Keyers or two DSKs.	
Multi-viewer	2/4/5/7/9/10/11/16-way split views with title, tally and audio level meter display and 1 frame delay for PGM output	
Proc. Amp.	Equipped with all inputs	
Event Memory	100 events (complementary transition available when loading events)	
Macro Function	30 commands (up to 230 series of operations can be registered per command)	
Genlock Input	BB: NTSC: 0.429 Vp-p/PAL: 0.45 Vp-p or Tri-level Sync: 0.6 Vp-p, 75Ω, BNC x 1, loop-through (to be terminated with 75Ω terminator, if unused)	
System Phase Adjust	Horizontal: -1/2H to +1/2H	
Genlock Output	BB: NTSC: 0.429 Vp-p/PAL: 0.45 Vp-p or Tri-level Sync: 0.6 Vp-p, 75Ω, BNC x 1	
I/O Delay	1H (minimum delay)	
	1 to 2 frames +1H (when FS or re-size engine used)	
	2 to 3 frames +1H (when FS or re-size engine plus DVE used)	
	3 to 4 frames +1H (when FS or re-size engine plus output resize engine and DVE used)	
External Memory	USB flash drive	
Interface	Ethernet (10/100Base-TX): RJ-45 x 1	
	TO OU: RJ-45 x 1	—
	GPI-IN/OUT: 25-pin D-sub (female) x 1 (24 inputs/24 outputs), TTL negative logic pulse or Make-contact	
	RS-422: 9-pin D-sub (female) x 2 (for the HVS-30RU and tally unit connection or EDITOR port (BVS-3000 and GVG-100 protocols))	
Interface (optional)	ARCNET: 75Ω, BNC x 2, loop-through (to be terminated with 75Ω terminator, if unused.) (for control panel and AUX remote panel connection)	
Temperature / Humidity	0°C to 35°C / 10% to 90% (no condensation)	
Power / Consumption	HVS-XT100: 100 V AC to 240 V AC ±10%, 50/60 Hz / Approx. 240 W HVS-XT100OU: 100 V AC to 240 V AC ±10%, 50/60 Hz / Approx. 23 W	100 V AC to 240 V AC ±10%, 50/60 Hz / Approx. 190 W
Dimensions / Weight	HVS-XT100: Approx. 430 (W) x 88 (H) x 225 (D) mm / Approx. 5 kg (incl. optional cards: Approx. 7 kg at most) HVS-XT100OU: Approx. 420 (W) x 87.2 (H) x 246 (D) mm / Approx. 2.6 kg	Approx. 420 (W) x 129.3 (H) x 246 (D) mm / Approx. 4 kg
Consumables	Power supply unit (to be replaced every 5 years), Cooling fan (to be replaced every 4 years)	
Accessories	CD-ROM (user's manual), Quick setup guide, Rack mount brackets for main unit, AC cord, Main unit and control panel connecting cable (10 m)	CD-ROM (user's manual), Quick setup guide, AC power adaptor
Options	For details, see "Options" in the body text.	

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ISO 9001 and 14001 certified (Sakura R&D)

HD/SD Portable Video Switcher

HVS-XT100/XT110 "HANABI"

FOR-A
INNOVATIONS IN VIDEO and AUDIO TECHNOLOGY

HD/SD PORTABLE VIDEO SWITCHER

HVS-XT100/XT110

HANABI

HVS-XT100 and XT110:
True Successors to the World Standard in Small HD/SD Switchers!

Enhanced Multi-functionality and Unbelievable Cost Performance

The HVS-XT100 and the HVS-XT110, the newest additions to FOR-A's Hanabi series of portable video switchers, boast exceptional cost performance. Both mixers inherit and improve upon the diverse functions and features of the popular HVS-300HS, including mixed HD/SD input, frame synchronizing, re-sizing engine, 2.5D wipe effects, DVE, Chroma keyer and DSK. The HVS-XT100 and HVS-XT110 also have a built-in Web server that lets you change settings from a PC or a tablet. A clip memory feature has been added to the still store to support playback of video or animations and enhances productions through the use of CG wipes, while the multi-viewer meets a diverse range of monitoring needs. The equipment can be used in all types of locations, including live events, sports, news studios, OB vans, editorial offices and presentation venues, making it the ideal tool for shaping the imaginative ideas of video creators.

Product Line-up

The HVS-XT series comes in two models: one with separate main unit and control panel, and one with compact, integrated design, both of which can be adapted to a wide variety of applications and operation configurations.

HVS-XT100 (bottom) and HVS-XT100OU (top)

HVS-XT100

Separate Main Unit/Control Panel Type

The control panel has been laid out specifically with professionals in mind with a design that leverages the knowledge of expert operators. It includes dedicated bus buttons, AUX buttons, a fader controller and direct user buttons for various functions. The main unit offers exceptional expandability to facilitate the addition of a redundant power source unit and various input/output cards.

HVS-XT110

Integrated Main Unit/Control Panel Type

Featuring operability almost on par with the HVS-XT100, the HVS-XT110 also boasts a compact design enabling simple portability. The inclusion of ample video input and output functionality, making it ideal for use in small broadcasting vans and broadcasting helicopters. Despite being portable, a redundant power source is also possible using an optional AC adaptor.

HVS-XT100/XT110 Main Features

Standard 8, Maximum 14 Inputs; Standard 4 + 1, Maximum 9 outputs (HVS-XT100)

8 HD/SD-SDI inputs, 4 HD/SD-SDI outputs and 1 HDMI output come as standard. Mixed HD/SD input is supported in the standard configuration. The 5 outputs can all be freely assigned. Three slots enable various inputs and outputs to be added, such as analog component, analog composite, HDMI, and VGA in addition to more HD/SD-SDI.

12 Inputs; 8 + 1 Outputs (HVS-XT110)

12 HD/SD-SDI inputs, 8 HD/SD-SDI outputs and 1 HDMI output come as standard. Mixed HD/SD input is supported in the standard configuration. The 9 outputs can all be freely assigned.

Input/Output Card Configuration

The following outlines combinations of input/output cards that can be used in the HVS-XT100 slots. Refer to "Options" for details of cards.

Slot A	Slot B	Slot C	Number of Inputs / Outputs
– (All slots open in standard configuration)			HD/SD-SDI Input x 8, Output x 4 / PC Output x 1
HVS-XT100AI*1	–	–	HD/SD-SDI Input x 8, Output x 4 / Analog Input x 2 / PC Output x 1
HVS-XT100AI	HVS-XT100AI	–	HD/SD-SDI Input x 8, Output x 4 / Analog Input x 4 / PC Output x 1
HVS-XT100AI	HVS-XT100AI	HVS-XT100AO*2	HD/SD-SDI Input x 8, Output x 4 / Analog Input x 4, Output x 2 / PC Output x 1
HVS-XT100AI	HVS-XT100AI	HVS-XT100DO*2	HD/SD-SDI Input x 8, Output x 6 / Analog Input x 4 / PC Output x 1
HVS-XT100AI	HVS-XT100AI	HVS-XT100PCO*2	HD/SD-SDI Input x 8, Output x 4 / Analog Input x 4 / PC Output x 3
HVS-XT100AI	HVS-XT100PCI	–	HD/SD-SDI Input x 8, Output x 4 / Analog Input x 2 / PC Input x 2
HVS-XT100AI	HVS-XT100PCI	HVS-XT100AO	HD/SD-SDI Input x 8, Output x 4 / Analog Input x 2, Output x 2 / PC Input x 2, Output x 1
HVS-XT100AI	HVS-XT100PCI	HVS-XT100DO	HD/SD-SDI Input x 8, Output x 6 / Analog Input x 2 / PC Input x 2, Output x 1
HVS-XT100AI	HVS-XT100PCI	HVS-XT100PCO	HD/SD-SDI Input x 8, Output x 4 / Analog Input x 2 / PC Input x 2, Output x 3
HVS-XT100AI	HVS-XT100AO	–	HD/SD-SDI Input x 8, Output x 4 / Analog Input x 2, Output x 2 / PC Output x 1
HVS-XT100AI	HVS-XT100AO	HVS-XT100AO	HD/SD-SDI Input x 8, Output x 4 / Analog Input x 2, Output x 4 / PC Output x 1
HVS-XT100AI	HVS-XT100AO	HVS-XT100DO	HD/SD-SDI Input x 8, Output x 6 / Analog Input x 2, Output x 2 / PC Output x 1
HVS-XT100AI	HVS-XT100AO	HVS-XT100PCO	HD/SD-SDI Input x 8, Output x 4 / Analog Input x 2, Output x 2 / PC Output x 3
HVS-XT100AI	HVS-XT100DO	–	HD/SD-SDI Input x 8, Output x 6 / Analog Input x 2 / PC Output x 1
HVS-XT100AI	HVS-XT100DO	HVS-XT100DO	HD/SD-SDI Input x 8, Output x 8 / Analog Input x 2 / PC Output x 1
HVS-XT100AI	HVS-XT100PCO	–	HD/SD-SDI Input x 8, Output x 4 / Analog Input x 2 / PC Output x 3
HVS-XT100AI	HVS-XT100PCO	HVS-XT100DO	HD/SD-SDI Input x 8, Output x 6 / Analog Input x 2 / PC Output x 3
HVS-XT100AI	HVS-XT100PCO	HVS-XT100PCO	HD/SD-SDI Input x 8, Output x 4 / Analog Input x 2 / PC Output x 5
HVS-XT100DI-A*3	–	–	HD/SD-SDI Input x 12, Output x 4 / PC Output x 1
HVS-XT100DI-A	HVS-XT100AI	–	HD/SD-SDI Input x 12, Output x 4 / Analog Input x 2 / PC Output x 1
HVS-XT100DI-A	HVS-XT100AI	HVS-XT100AO	HD/SD-SDI Input x 12, Output x 4 / Analog Input x 2, Output x 2 / PC Output x 1
HVS-XT100DI-A	HVS-XT100AI	HVS-XT100DO	HD/SD-SDI Input x 12, Output x 6 / Analog Input x 2 / PC Output x 1
HVS-XT100DI-A	HVS-XT100AI	HVS-XT100PCO	HD/SD-SDI Input x 12, Output x 4 / Analog Input x 2 / PC Output x 3
HVS-XT100DI-A	HVS-XT100PCI	–	HD/SD-SDI Input x 12, Output x 4 / PC Input x 2, Output x 1
HVS-XT100DI-A	HVS-XT100PCI	HVS-XT100AO	HD/SD-SDI Input x 12, Output x 4 / Analog Output x 2 / PC Input x 2, Output x 1
HVS-XT100DI-A	HVS-XT100PCI	HVS-XT100DO	HD/SD-SDI Input x 12, Output x 6 / PC Input x 2, Output x 1
HVS-XT100DI-A	HVS-XT100PCI	HVS-XT100PCO	HD/SD-SDI Input x 12, Output x 4 / PC Input x 2, Output x 3
HVS-XT100DI-A	HVS-XT100AO	–	HD/SD-SDI Input x 12, Output x 4 / Analog Output x 2 / PC Output x 1
HVS-XT100DI-A	HVS-XT100AO	HVS-XT100AO	HD/SD-SDI Input x 12, Output x 4 / Analog Output x 4 / PC Output x 1
HVS-XT100DI-A	HVS-XT100AO	HVS-XT100DO	HD/SD-SDI Input x 12, Output x 6 / Analog Output x 2 / PC Output x 1
HVS-XT100DI-A	HVS-XT100AO	HVS-XT100PCO	HD/SD-SDI Input x 12, Output x 4 / Analog Output x 2 / PC Output x 3
HVS-XT100DI-A	HVS-XT100DO	–	HD/SD-SDI Input x 12, Output x 6 / PC Output x 1
HVS-XT100DI-A	HVS-XT100DO	HVS-XT100DO	HD/SD-SDI Input x 12, Output x 8 / PC Output x 1
HVS-XT100DI-A	HVS-XT100PCO	–	HD/SD-SDI Input x 12, Output x 4 / PC Output x 3
HVS-XT100DI-A	HVS-XT100PCO	HVS-XT100DO	HD/SD-SDI Input x 12, Output x 6 / PC Output x 3
HVS-XT100DI-A	HVS-XT100PCO	HVS-XT100PCO	HD/SD-SDI Input x 12, Output x 4 / PC Output x 5
HVS-XT100PCI*1	–	–	HD/SD-SDI Input x 8, Output x 4 / PC Input x 2, Output x 1
HVS-XT100PCI	HVS-XT100AI	–	HD/SD-SDI Input x 8, Output x 4 / Analog Input x 2 / PC Input x 2, Output x 1
HVS-XT100PCI	HVS-XT100AI	HVS-XT100AO	HD/SD-SDI Input x 8, Output x 4 / Analog Input x 2, Output x 2 / PC Input x 2, Output x 1
HVS-XT100PCI	HVS-XT100AI	HVS-XT100DO	HD/SD-SDI Input x 8, Output x 6 / Analog Input x 2 / PC Input x 2, Output x 1
HVS-XT100PCI	HVS-XT100PCI	–	HD/SD-SDI Input x 8, Output x 4 / PC Input x 4, Output x 1
HVS-XT100PCI	HVS-XT100PCI	HVS-XT100AO	HD/SD-SDI Input x 8, Output x 4 / Analog Output x 2 / PC Input x 4, Output x 1
HVS-XT100PCI	HVS-XT100PCI	HVS-XT100DO	HD/SD-SDI Input x 8, Output x 6 / PC Input x 4, Output x 1
HVS-XT100PCI	HVS-XT100PCI	HVS-XT100PCO	HD/SD-SDI Input x 8, Output x 4 / PC Input x 4, Output x 3
HVS-XT100PCI	HVS-XT100AO	–	HD/SD-SDI Input x 8, Output x 4 / Analog Output x 2 / PC Input x 2, Output x 1
HVS-XT100PCI	HVS-XT100AO	HVS-XT100AO	HD/SD-SDI Input x 8, Output x 4 / Analog Output x 4 / PC Input x 2, Output x 1
HVS-XT100PCI	HVS-XT100AO	HVS-XT100DO	HD/SD-SDI Input x 8, Output x 6 / Analog Output x 2 / PC Input x 2, Output x 1
HVS-XT100PCI	HVS-XT100AO	HVS-XT100PCO	HD/SD-SDI Input x 8, Output x 4 / Analog Output x 2 / PC Input x 2, Output x 3
HVS-XT100PCI	HVS-XT100DO	–	HD/SD-SDI Input x 8, Output x 6 / PC Input x 2, Output x 1
HVS-XT100PCI	HVS-XT100DO	HVS-XT100DO	HD/SD-SDI Input x 8, Output x 8 / PC Input x 2 / PC Output x 1
HVS-XT100PCI	HVS-XT100PCO	–	HD/SD-SDI Input x 8, Output x 4 / PC Input x 2, Output x 3
HVS-XT100PCI	HVS-XT100PCO	HVS-XT100DO	HD/SD-SDI Input x 8, Output x 6 / PC Input x 2, Output x 3
HVS-XT100PCI	HVS-XT100PCO	HVS-XT100PCO	HD/SD-SDI Input x 8, Output x 4 / PC Input x 2, Output x 5
–	HVS-XT100AO	–	HD/SD-SDI Input x 8, Output x 4 / Analog Output x 2 / PC Output x 1
–	HVS-XT100AO	HVS-XT100AO	HD/SD-SDI Input x 8, Output x 4 / Analog Output x 4 / PC Output x 1
–	HVS-XT100AO	HVS-XT100DO	HD/SD-SDI Input x 8, Output x 6 / Analog Output x 2 / PC Output x 1
–	HVS-XT100AO	HVS-XT100PCO	HD/SD-SDI Input x 8, Output x 4 / Analog Output x 2 / PC Output x 3
–	HVS-XT100PCO	–	HD/SD-SDI Input x 8, Output x 4 / PC Output x 3
–	HVS-XT100PCO	HVS-XT100DO	HD/SD-SDI Input x 8, Output x 6 / PC Output x 3
–	HVS-XT100PCO	HVS-XT100PCO	HD/SD-SDI Input x 8, Output x 4 / PC Output x 5
–	HVS-XT100DO	–	HD/SD-SDI Input x 8, Output x 6 / PC Output x 1
–	HVS-XT100DO	HVS-XT100DO	HD/SD-SDI Input x 8, Output x 8 / PC Output x 1

*1 HVS-XT100AI and HVS-XT100PCI input cards can only be used in slots A and B.
*2 HVS-XT100DO, HVS-XT100AO, and HVS-XT100PCO output cards can only be used in slots B and C.
*3 HVS-XT100DI-A input card can be used in slot A and B (used in slot B, only 2 HD/SD-SDI channels are expanded).

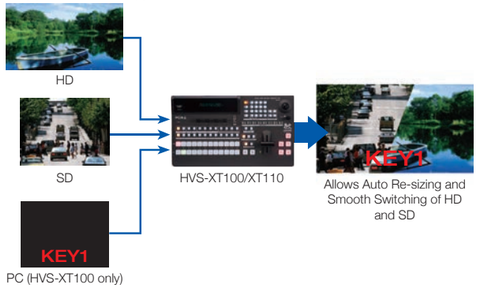
HVS-XT100/XT110 Main Features

Frame Synchronizers

Every input in the HVS-XT100 and 8 inputs in the HVS-XT110 are fitted with frame synchronizers that enable switching of synchronous and asynchronous video signals. Installation of optional expansion cards supports asynchronous picture input from PCs, etc. Each input is also equipped with a process amplifier capable of adjusting the video level and chroma level, etc. of the input signal.

Re-sizing Engine

Up-resizing engines are provided on 4 of the standard inputs. This achieves a fully mixed SD/HD environment with the switcher alone. The optional input cards also have re-sizing engine on each input. This is readily suitable for re-sizing not only SD signals but also PC video (*Up-resizeing engines are not supported at 1080p).



2 Keyers and 2 DSKs

Further proof of the power of these new small mixers is that they come as standard with 2 keyers, 2 DSKs and 4 powerful 2.5D DVE engines.

Advance Chroma Key

An advanced, high quality Chroma keyer can be assigned to any one of the two M/E Keyers or two Downstream Keyers.

4 DVE 2.5D (rotation and perspective)

The 4* powerful DVE engines, can be assigned to any keyer or used for transitions etc, and with their standard 2.5D ability, allows flexible creativity for the operator to enhance productions (Only 2 DVE engines are available at 1080p).

Abundant Transitions and DVEs

Cut, mix and wipe can be chosen for the transition. Diverse DVE wipes include 100 2.5D wipe patterns. Along with wipes, effects like mosaic and defocus are also provided.

2 Still/Clip Stores

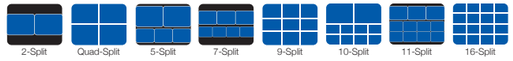
Powerful, high capacity clip stores are now a standard feature. Each store can hold up to 227 frames of HD video. Images can be recorded and played back from incoming video or PGM o/p, or animations transferred over FTP (.bmp, .jpeg, .tga sequences). Clip store images can be used as CG wipe transitions, to further enhance possibilities and add production value. In addition, should both stores be used for clips, then still images can be used as well, by the standard feature of using some of the inputs as still stores.

Macro Function

A macro function enables you to store and register a series of operations and then perform complicated operations with one push of a button.

2/4/5/7/9/10/11/16 Split Multi Viewer

Display channels can be freely assigned, allowing assignment of not only input source but also PGM output. Each channel offers title display and tally display functions.



Event Memory and User Button

The main unit is equipped with an event memory function allowing up to 100 events to be stored. Event memories can be simply recalled by the user buttons. Mixer set-ups and useful operational tools such as key set up, DVE position/size etc can all be stored in event memories. Operators can freely set the transition time and effect for loading events. By setting up in advance, event memories can bring extra power and creativity, simply by pressing buttons during the live event. User buttons can also be used for many other features, such as instant navigation to a selectable menu page, or grab a still, or send a GPI, or preview a key etc as well as many other functions to make life easier in a live production.

Freely Assignable DSK

The 2 Downstream keyers can be assigned to either the M/E PGM, M/E PST or an AUX output. As we also include the ability to mix on an Aux crosspoint selection, the Aux outputs can effectively and creatively be used to do away with the need for multiple M/Es, when creating different outputs for different screens or feeds at a live venue.

External Interfaces

External interfaces include GPI port supporting up to 24 inputs/outputs and two RS-422 ports as standard. The RS-422 ports support for connecting an HVS-30RU remote unit, tally expansion boxes, device specific VDCP, VTR, MFR routers, or TSL. An Ethernet port is used during PC control. An editor interface option allow to connect to an editor/automation system or other external control system.

GUI Control Function via Web Browser

An in-built Web server enables the settings of the HVS-XT100 and HVS-XT110 to be changed from a PC via a network. Mobile and tablet terminals can also be used through a wireless access point.

HVS-XT100/XT110

GUI for PC and Tablet

Redundant Power Supply

An optional redundant power supply unit enables doubling-up of power source (redundant AC adaptor for the HVS-XT110). An enlarged fan and improved exhaust process guarantee quiet operation.

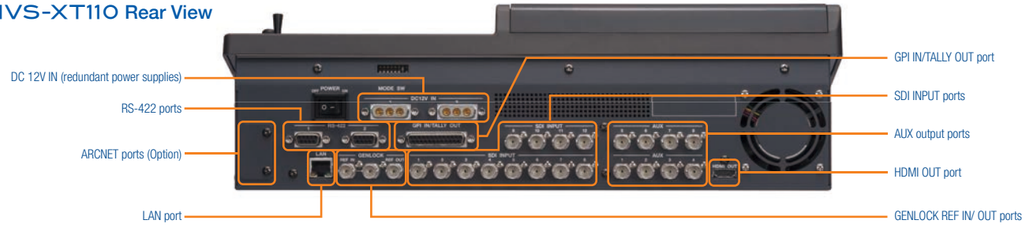
Other

- Safety area marker display
- Color bar generator
- Mat generator, etc.

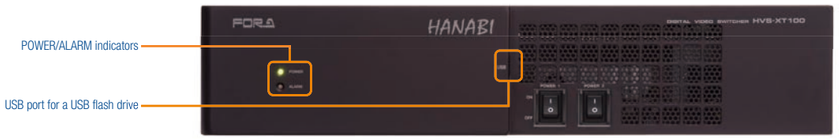
HVS-XT1000U/HVS-XT110 Front View

HVS-XT1000U Rear View

HVS-XT110 Rear View



HVS-XT100 Front View



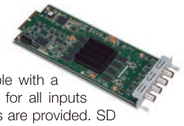
HVS-XT100 Rear View

Options

Options for the HVS-XT100

With the HVS-XT100, you can add just the input and output formats you need, in just the amount needed. There are three expansion slots so that other inputs and outputs can be installed, such as analog component, analog composite, HDMI and RGB in addition to HD/SD-SDI.

HVS-XT100DI-A
HD/SD-SDI Input Card



4 channels of HD/SD-SDI input are possible with a single card. A frame synchronizer function for all inputs and re-size (expansion) function for 2 inputs are provided. SD images can be processed internally as HD images.

HVS-XT100DO
HD/SD-SDI Output Card

2 channels of HD/SD-SDI output are possible with a single card. As down-converters are provided for all outputs, HD and SD images can simultaneously be output.

HVS-XT100AI
Analog Video Input Card

2 channels of analog video signal input are possible with a single card. Input terminal 2 is a dedicated connector (conversion connector supplied). The user can select between analog composite and analog component (HD or SD) input for each input terminal.

HVS-XT100AO
Analog Video Output Card

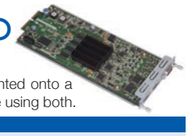
2 channels of analog video signal output are possible with a single card. Output terminal 2 is a dedicated connector (conversion connector supplied). The user can select between analog composite and analog component (HD or SD) output for each output terminal.

HVS-XT100PCI
PC (HDMI/VGA) Input Card

HDMI and VGA terminals have been mounted onto a single card. 2 input channels are possible using both.

Resolutions supported by the input cards	
• HD mode*	
1080p	1920 x 1080p (HDTV)
1080i	1024 x 768 (XGA), 1280 x 1024 (SXGA), 1600 x 1200 (UXGA), 1280 x 768 (WXGA), 1920 x 1200 (WUXGA), 1920 x 1080i (HDTV)
720p	1024 x 768 (XGA), 1280 x 1024 (SXGA), 1280 x 768 (WXGA), 1280 x 720 (HDTV)
• SD mode	640 x 480 (VGA), 800 x 600 (SVGA), 1024 x 768 (XGA), 720 x 480i (SDTV, NTSC), 720 x 576i (SDTV, PAL)

HVS-XT100PCO
PC (HDMI/VGA) Output Card



HDMI and VGA terminals have been mounted onto a single card. 2 output channels are possible using both.

Resolutions supported by the output cards	
• HD mode*	
1080p	1920 x 1080p (HDTV)
1080i	1280 x 1024 (SXGA), 1600 x 1200 (UXGA), 1680 x 1050 (WSXGA), 1920 x 1200 (WUXGA), 1920 X 1080i (HDTV)
720p	1280 x 1024 (SXGA), 1280 x 768 (WXGA), 1280 x 720p (HDTV)
• SD mode	800 x 600 (SVGA), 720 x 480i (SDTV, NTSC), 720 x 576i (SDTV, PAL)

* HDCP-incompatible

HVS-XT100PSM/XT100PSO
Redundant Power Supply Unit

- HVS-XT100PSM: For the HVS-XT100
- HVS-XT100PSO: For the HVS-XT100OU Control Panel

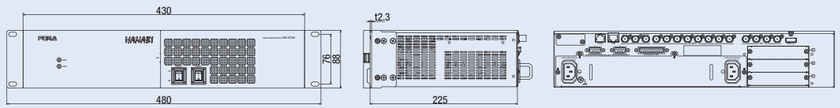
Options for the HVS-XT110

HVS-XT110PSM
Redundant Power Supply Unit

For the HVS-XT110

Dimensions

HVS-XT100 (Main Unit)



Options for the HVS-XT100 and XT110

HVS-TALOC20/32
HVS-TALR20/32
Tally Interface Unit

HVS-TALOC32

Open collector-type HVS-TALOC20/32 or relay-type HVS-TALR20/32 can be connected. They are both half-rack size, and as many as 3 units can be connected to the HVS-XT100 or HVS-XT110.

- HVS-TALOC20/32: open collector system with 20/32 terminals
- HVS-TALR20/32: relay system with 20/32 terminals

HVS-30RU
Remote Control Panel

This 1U compact control panel can be attached to the main unit. It comes with Full size crosspoint buttons on the operating surface, a compact liquid crystal display that shows the wipe pattern selected, and has been optimized for ease of use in a Live environment. This panel can also be used as a remote AUX panel.

HVS-XT100EXP3G
3Gbps Expansion Software

Software to support 1080p format and 4K Square Division transmission methods.

HVS-XT100ARC
ARCNET Card

This enables connection to HVS-AUX8/AUX16.

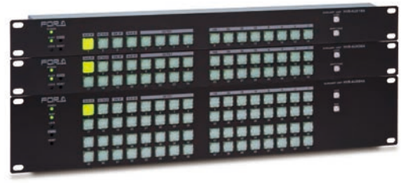
HVS-AUX8/AUX16
AUX Remote Control Panel

We have arranged AUX remote control panels with either 8 or 16 buttons. The 8-button panel is half a rack wide and the 16-button panel is of full rack width. 5 AUX remote control units can be daisy-chained via ARCNET. A panel extension kit enables the button interface to be extended.

- HVS-AUX8RK: Panel extension kit (for HVS-AUX8)
- HVS-AUXRK: Panel extension kit (for HVS-AUX16)

HVS-AUX16A/32A/64A
AUX Remote Control Panel

AUX remote control panels with either 16, 32 or 64 buttons. The16-button panel and the 32-button panel are 1U in size and the 64-button panel is 2U in size. 5 AUX remote control units can be daisy-chained via Ethernet.

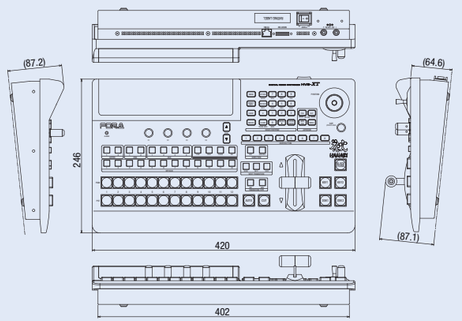


HVS-XT100ED
Editor Interface Software

Interface software to connect with an external device that supports BVS-3000/DVS and GVG-100 protocols.

Dimensions

HVS-XT100OU



HVS-XT110