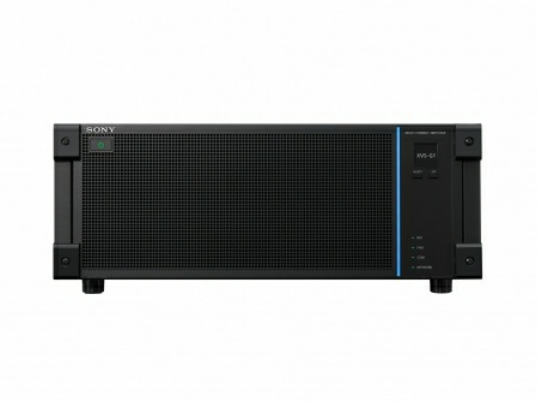
SONY

XVS-G1

Powerful and Compact Live Production Switcher



Panoramica

A new entry-level member of the XVS family

Sony is proud to introduce the latest member of the XVS family of production switchers. The XVS-G1 inherits many of the well-established features and architecture from the current models and adds cutting-edge technology for a range of visual processing enhancements. The all-new 4RU processor is combined with a range of four stylish new control panels plus a newly developed web-based operational menu for efficient and simple installations. The XVS-G1 builds on the success of the MVS-3000A and MVS-6530 switchers, bringing full HD and 4K(UHD) capacity at an affordable price. Configurable from 1 to 4 M/E banks, the XVS-G1 offers 16 full-feature keyers with up to 48 inputs, 24 outputs in HD mode, or 24 in, 12 out in 4K(UHD). These features make it the perfect choice for small and medium studios, flyaway packs and OB production units.

The next-generation platform in Live Production Switchers

The XVS-G1 introduces a hybrid architecture which augments the well-proven video processing structure of the XVS series with an optional GPU-based effects and graphics module. Its configuration retains a central processing unit (CPU) and field-programmable gate array (FPGA), whilst adding an optional graphics processing

unit (GPU), ensuring high performance and flexibility with visual processing enhancements while maintaining high reliability and stable operation.
High-speed processing, enabled by the hardware at 4K(UHD) resolution, and High Dynamic Range (HDR) imaging, means virtually no compromises in performance and speed for real-time processing and ultra-low latency. High-density, high-resolution video processing using the latest software technology provides versatility and upgradability. The XVS-G1 system offers an affordable and flexible solution to meet the creative needs of today's live productions.

A high-potential platform for maximum creativity realised by the optional GPU and modular software structure

The XVS-G1 offers new creative features including a built-in clip player, 3D digital multi-effects, extra still logo keys, and new multi-viewer functionality. HDR is also supported with Sony's SR Live workflow and multiple HDR format conversion options.
16 keyers are provided, each with its own 2.5D resizer. These full-function keyers can be deployed in various configurations across 1 to 4 M/E banks. An additional dedicated Clip Transition keyer is available on each M/E.
The optional GPU pack provides a file-based clip player, integrated for the first time in a Sony live production switcher. There are four channels in HD mode and two channels in 4K(UHD) mode. Multiple clips can be stored and replayed, each with a maximum duration, for both HD and 4K(UHD) content, of up to 60 minutes. Widely available AVC codec files in MOV or MP4 container formats are supported.
Other functions provided by the GPU include 4 channels of full 3D digital multi-effects in HD mode or 2 channels in 4K(UHD), and four still logo keyers.
Media files are easily and instantly loaded into the

internal SSD storage directly from any network-connected device via a web browser. The user-friendly style of the clip player and switcher minimises preparation and setup time, simplifying live operation.

New design multi-viewer

New design multi-viewer offers enhanced features including in-vision audio monitoring and clock, with a choice of 4, 10, 13 and 16-way splits.

New web-based menu perfectly suited to News, Sports and Entertainment programme production

The user menu is based on a newly designed web application. This allows flexible wired or wireless operation via any connected PC, laptop or tablet. An enhanced menu system builds on the familiar structure of the existing XVS series, whilst new menus allow easy access to innovative features such as the GPU clip player and additional logo keyers. Multiple menu pages can be viewed simultaneously. The web application provides efficient and speedy menu navigation including future remote operation.

Menu system features

• Web application based user-friendly menu design
• Cable-free menu operation possible by any web-based device via WiFi
• Up to 16 web browsers connected simultaneously for multi-menu, multi-access setup or remote operation
• Panel button status accurately reflected on menu display
• Fewer menu layers for rapid access to desired item
• Intuitive menu tree structure and graphical display
• Touch Pad operation for parameter adjustment

New dedicated control panels retain Sony's popular operator features

A range of four new control panels offers 1 M/E or 2 M/E configurations with 16 or 24 source button layouts. Derived from Sony’s renowned ICP-X7000 Series, they all ensure compact, easy and reliable operation. The panels inherit many familiar features of Sony’s XVS high-end switchers, including excellent on-air status display, unsurpassed button feel, and dependable speed in mission-critical live production.

Remote operation

In addition to the familiarity around user experience, the new panel also inherits the same remote capabilities by supporting L3 switching, enable complex remote workflows to be simplified.

The XVS-G1 system is a perfect fit for the small to mid-size studio, broadcast remote trucks, faith-based community, universities, corporations and fly pack production units.

Attributi

Control Panel Button Layout

Utility & ShotBox Block

• 15 color LCD buttons with 20 assignable buttons
• UTIL/SB mode : Utility/ShotBox recall
• Menu mode : Menu parameter adjustment with rotary knobs

Device Control Block

• Easy-to-use trackball for fine adjustment, plus direct access buttons
• Resizer / DME adjustment (Size, Position, Rotation, etc)
• DDR / VTR control (Play, Stop, Jog / Shuttle, etc)

Transition Block

• Next Transition Block with assignable buttons enables extremely flexible operation
• OLED displays for M/E name or Transition Rate
• 8 Key Transition buttons for 4 Keyers (AUTO+CUT) or 8 Keyers (AUTO)

FlexiPad Block

• The Flexi Pad is used for creating and recalling memorized functions for easy operation.
• Macro / ShotBox direct execution, Macro editing
• Snapshot / Wipe Snapshot / DME-Wipe Snapshot recall

Crosspoint Block

• OLED Source Name display (up to 12 characters)
• Tri-Color buttons with selectable coloring for easy grouping of sources
• Assignable Delegation buttons (Key 1-8, AUX1-16, Utility / ShotBox, Macro)
• Both Key Bus mode and Key Delegation mode are supported

Powerful features in a single compact processor unit

Up to 4M/E, 48 inputs and 24 outputs in HD/1080p mode or 2M/E, 24 inputs and 12 outputs in 4K(UHD) mode can be configured by adding optional I/O boards.
Multiple signal source formats in SD, HD (1080i/720p/1080p) or 4K(UHD) are supported by 1.5G, 3G and 12G video connections.

XVS series engine gives unsurpassed reliability and performance

• Keyers and Resizers
Full XVS quality signal processing with 16 full-function keyers (chroma, linear, luminance, borders etc.). Each keyer has its own inbuilt 2.5D resizer, allowing 16

Picture-in-Picture effects with perspective.

• Frame Memory
Enhanced Frame Memory with stills, clips or audio files. 32 GB memory for frame rate recall, with high-speed SSD for backup/restore. New dedicated Clip Transition bus allows an extra transition layer without consuming any keyer resources.

• Multi Viewer
Two independent HD multi viewers are standard, one 4K(UHD) multi viewer is supported in 4K(UHD) format. 4, 10, 13 and 16-way splits, Source Names and Tally indicators are supported. In addition, with the GPU option installed then a clock and audio level meters are also available in the multi viewer.

Others

• Macro, Snapshot, and Keyframe Effect allow speedy memory store and recall in creative live operation

• Built-in redundant power supply as standard

Robust and reliable integration with XVS Series live production switchers

The XVS-G1 switcher embodies Sony’s XVS Series DNA of reliability, robustness, and durability, in a new compact processing unit that’s easy to install, setup and operate. System expandability including third-party new and legacy tally systems, studio automation control, and remote distance production between the processor and the control panel over the IP network are also supported, to meet your requirements from a simple switcher configuration to a large-scale integrated live production system.

Optional products

XKS-G1110 Additional I/O Board
XKS-G1700 Legacy Interface Option
ICP-X1116 1 M/E 16 button Compact Control Panel
ICP-X1124 1 M/E 24 button Compact Control Panel
ICP-X1216 2 M/E 16 button Compact Control Panel
ICP-X1224 2 M/E 24 button Compact Control Panel
XKS-G1600 GPU Pack
XZS-G1610 3D DME License
XZS-G1620 SL Key License
XZS-G1800 Clip Player License
XZS-G1500 4K(UHD) Upgrade License
XZS-G1750 HDR Converter License
XZS-G1770 Automation IF License
RMM-1100 Rack Mount Kit

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General	
Power requirement	AC100-127V 50/60Hz AC200-240V 50/60Hz
Power consumption	100-127V : 6.5A (tentative) 200-240V : 3.3A (tentative) (when equipped with all installable option boards)
Operating temperature	5 ºC to 40 ºC (41 ºF to 104 ºF)
Storage temperature	- 20 ºC to 60 ºC (- 4 ºF to 140 ºF)
Operating humidity	10 % to 90 %
Dimensions (W x H x D)	440 x 176 x 583 mm (17 3/8 x 7 x 23 inches)

Mass	Approx. 21 kg (46 lb 5 oz) (when equipped with all installable option boards)

Video inputs/outputs

Inputs (Max) (BNC)	48 for primary inputs (when equipped with all installable option boards, XKS-G1110)
Outputs (Max) (BNC)	24 for outputs (when equipped with all installable option boards, XKS-G1110)
Signal format	SMPTE 259M-C/292M, SMPTE 424M/425-1/5, SMPTE ST 2082-1
Signal Processing	4 : 2 : 2 digital component
Quantization	12G-SDI : 10-bit, HD-SDI : 10-bit

Reference

Reference input	BNC (x2), 75 Ω with loop-through output HD tri-level sync or Analog black burst
Reference output	BNC, 75 Ω output HD tri-level sync or Analog black burst

Control

LAN 1	RJ-45 (x1), 1000BASE-T

LAN 2	RJ-45 (x1), 1000BASE-T
GPI	D-sub 25-pin (x1), open collector outputs 16 ch, 3.3V TTL input 6ch
USB 2.0	USB 2.0 (x2) for maintenance only
USB 3.0	USB 3.0 (x2) for maintenance only
Optional TALLY/GPI, RS-422 (XKS-G1700)	D-sub 25-pin (x1), open collector outputs 16 ch, 3.3V TTL input 6ch RS-422 (x8)

Supported Formats

4K	3840x2160/60P*1*4, 3840x2160/59.94P*1, 3840x2160/50P*1, 3840x2160/29.97P*4, 3840x2160/25P*4, 3840x2160/24P*4, 3840x2160/23.98P*4
HD	1080/59.94P*3, 1080/50P*3, 1080/29.97PsF*4, 1080/25PsF*4, 1080/24PsF*4, 1080/23.98PsF*4, 1080/59.94i, 1080/50i, 720/59.94P*4, 720/50P*4

Notes

*1 SMPTE ST 425-5, Level A, 2-sample interleave division

	(2SI) and square division (SQD) compliant. *2 Square division (SQD) compliant. *3 SMPTE ST 425-1, Level A compliant. *4 Version up required.

ICP-X Panel - General

Power requirement	ICP-X1224/X1216/X1124/X1116: DC IN-A/B : +19.5 V DC
Power consumption	ICP-X1224: 2.1 A DC ICP-X1216: 1.7 A DC ICP-X1124: 1.6 A DC ICP-X1116: 1.3 A DC
Operating temperature	ICP-X1224/X1216/X1124/X1116: 5˚C to 40˚C (41˚F to 104˚F)
Dimensions (W x H x D)	ICP-X1224: 912.0 mm x 438.5 mm x 94.7 mm (36 x 17 3/8 x 3 3/4 inches) ICP-X1216: 757.6 mm x 438.5 mm x 94.7 mm (29 7/8 x 17 3/8 x 3 3/4 inches) ICP-X1124: 912.0 mm x 292.2 mm x 87.9 mm (36 x 11 5/8 x 3 1/2 inches) ICP-X1116: 757.6 mm x 292.2 mm x 87.9 mm (29 7/8 x 11 5/8 x 3 1/2 inches)
	ICP-X1224: Approx. 15.0 kg

Mass	(33 lb 1 oz) ICP-X1216: Approx. 13.5 kg (29 lb 12 oz) ICP-X1124: Approx. 9.5 kg (20 lb 15 oz) ICP-X1116: Approx. 9.0 kg (19 lb 13 oz)

ICP-X Panel - Control

LAN-A1	ICP-X1224/X1216/X1124/X1116: RJ-45 (x1), 1000BASE-T
LAN-A2	ICP-X1224/X1216/X1124/X1116: RJ-45 (x1), 1000BASE-T
LAN-B	ICP-X1224/X1216/X1124/X1116: RJ-45 (x1), 1000BASE-T

Galleria