12G/3G/HD Video Switcher
HVS-1200 "HANABI"

FOR.A®

12G/3G/HD Video Switcher

HVS-1200

HANABI

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HANABI

Perfect choice for mobile production or events

The HVS-1200 builds on the features of the HANABI HVS-100/110 and HVS-490 video switchers and adds 12G-SDI support as standard. One or two M/E switching (in 4K(UHD) and HD mode, respectively) is just the start. Enjoy two or six M/E performance in these modes thanks to FOR-A's MELite™ technology. The compact, 3U form factor is exceedingly portable, making the HVS-1200 the perfect choice for mobile production or events.

Various features

Standard 12G-SDI support

10 12G-SDI inputs come standard on this compact unit. Use as a switcher in HD mode with 40 inputs and 2M/Es. Can be used mainly for HD switching while switching to 4K(UHD) as needed. Enjoy convenient operation in HD mode and smoother migration to a 4K(UHD) environment.

Ten standard inputs in 4K(UHD) mode

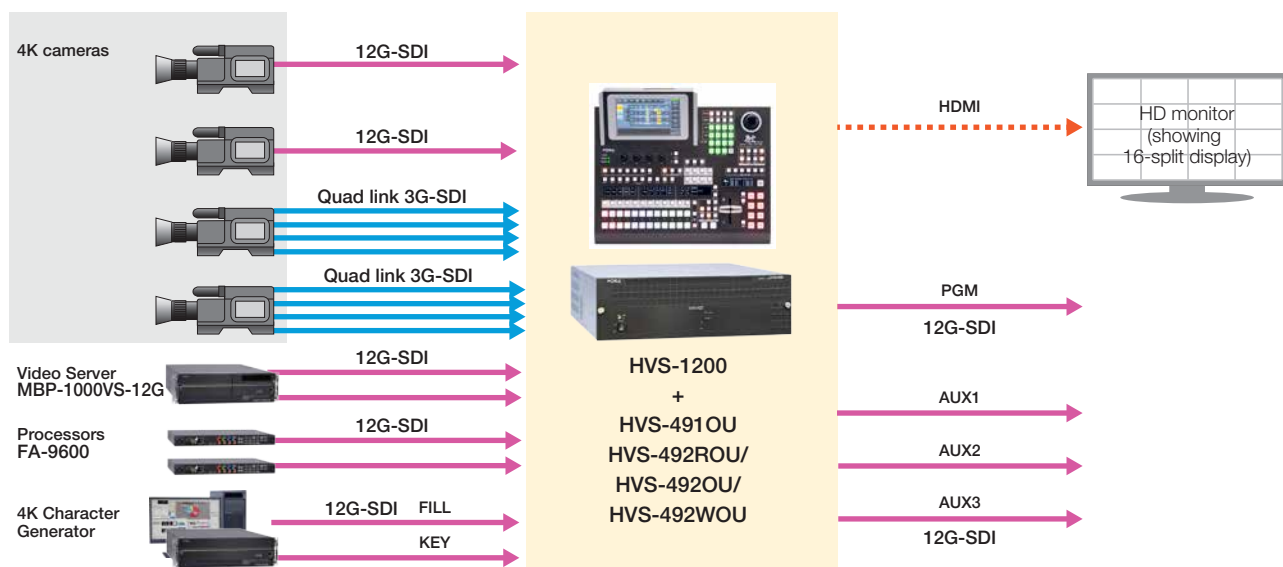4K(UHD) mode: 10 inputs and 10 outputs, including two outputs for HDMI 2.0 Level B.

Mixed inputs of 12G-SDI and quad link 3G-SDI are supported.

Two inputs/outputs supported for 29.97p/25p/24p/23.98p.

HD mode: 40 inputs and ten outputs are supported, including two outputs for HDMI 2.0 Level B.

Frame synchronization on all inputs enables switching of synchronous and asynchronous sources.

Example of 4K system configuration

- 4K cameras — 12G-SDI
- 12G-SDI
- Quad link 3G-SDI
- Quad link 3G-SDI
- Video Server MBP-1000VS-12G — 12G-SDI
- Processors FA-9600 — 12G-SDI
- 4K Character Generator — 12G-SDI FILL / KEY

HVS-1200 + HVS-491OU HVS-492ROU/ HVS-492OU/ HVS-492WOU

- HDMI → HD monitor (showing 16-split display)
- PGM 12G-SDI
- AUX1
- AUX2
- AUX3 12G-SDI

MELite™

MELite is patented FOR-A technology that expands the capabilities of AUX transitions. With an AUX bus, users can preview transitions before executing them and enjoy the same control over AUX output as for PGM or PST. One MELite (in 4K-UHD mode) or four MELite (in HD mode) are provided. Assigning FLEXaKEY to an MELite expands the system, making 2 M/E performance (in 4K-UHD mode) and 6 M/E performance (in HD mode) possible with this 1 M/E switcher.

● Users can preview output from an AUX bus when applying transitions[1] (cut, mix, or wipe) or when keying. This ground-breaking technology makes sure your production is ready for virtually any request.

● For more sophisticated switching needs, MELite can be assigned before the M/E buses.

● Any M/E can be assigned to multiple on-stage monitors for independent background transitions and graphics transitions - all from the same control panel.
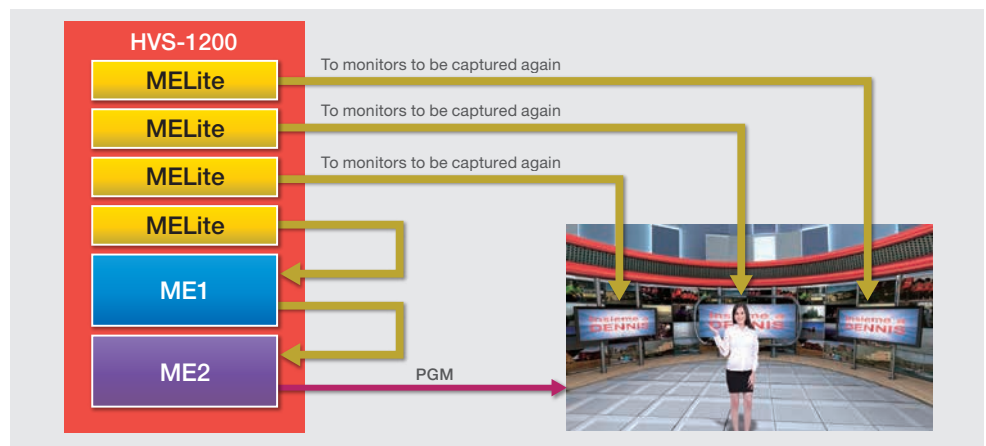
[1] DVE transitions are not included.

FLEXaKEY™

Special FLEXaKEY keyers are designed for flexible reassignment. The one FLEXaKEY (in 4K(UHD) mode) or four FLEXaKEYs (in HD mode) provided operate separately from standard keyers of the full M/E buses. Easy keying of four different FLEXaKEYs in any AUX bus enables performances beyond the reach of conventional switchers.

● The FLEXaKEY system can be freely assigned to M/E or AUX buses.
- 4K(UHD) mode: Combine up to three keyers for an M/E bus (2 keyers + 1 FLEXaKEY).
- HD mode: Combine up to eight keyers for an M/E bus (4 keyers + 4 FLEXaKEY).
● P-in-P display is possible using an AUX bus. Assigning FLEXaKEY to an MELite enables use as an upstream key.
● FLEXaKEY can also be applied to create a multi-monitor video wall with a single HVS-1200.

Example of HD system using MELite and FLEXaKEY

Transitions/DVEs

Choose from cut, mix, or wipe transitions. In addition to 100 wipe patterns, the switcher offers five[2] (in 4K(UHD) mode)/16 (in HD mode) 2.5D DVE wipes, such as: rotate, perspective and reposition. Other rich effects include: mosaic, posterization, pseudo color and defocus.

[2] Offers up to four 2.5D DVE wipes at 2160/59.94p and 50p.

Standard multi viewer output

The HVS-1200 provides two displays of multi viewer output[3], each supporting up to 16-split display. More than eight screen layouts each are available. This provides an optimal monitoring environment for both the main operator and other users. Tallys, titles (up to 8 letters) and audio level meters can be displayed on each window.

[3] Supports HD resolution (1920 x 1080).

Various features

■ AES Digital Audio I/O*4

Supports four lines (eight channels) of balanced or unbalanced audio input and output. Enables demuxing of video/clip input and muxing of video output. Use an internal sampling rate converter to sync audio input to the system.

*4 HVS-49AES is required

■ Clean Switching

For noiseless transitions, audio is muted when video is switched.

■ 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.

■ Event Memory/User Button

Up to 100 registers of control panel configurations can be stored as events. Event memories can be recalled from the user buttons on the control panels and remote control panels. Operators can set the transition durations and effects. By storing events in advance, operators can use event memories to make performances more expressive, simply by pressing buttons during the event. And because a variety of HVS-1200 functions can be freely assigned to user buttons, operators can customize control panels.

■ Still/Clip Stores

One (in 4K(UHD) mode) and four (in HD mode) sill/clip stores are equipped. Load video input signals or PGM output signals as stills*5 or import data (either stills or clips with up to 449 frames (in 4K(UHD) mode) and 1797 frames (in HD mode)) created on a computer for use as wipes. Stills and clips are loaded from a control panel and computer. Using the backup feature, operators can also save stills or clips to an optional SSD in the switcher to load the data when the HVS-1200 is restarted.

*5 JPEG, TGA, and BMP supported

■ GUI Control Function

Thanks to a built-in Web server, the HVS-1200 can be controlled from a computer connected via Ethernet. Settings can also be adjusted from mobile devices connected via Wi-Fi to a local access point.

■ Color Corrector Function

One color corrector (in 4K(UHD) mode) and four color correctors (in HD mode) are available per M/E.
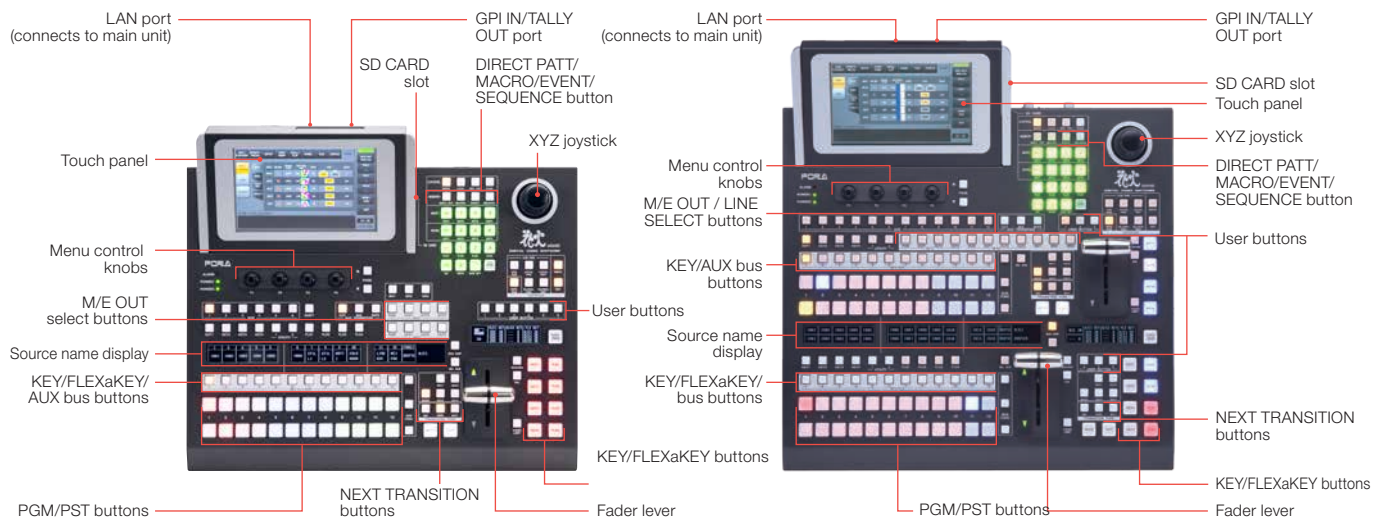
■ Sequence Function

Up to 30 patterns can be registered.
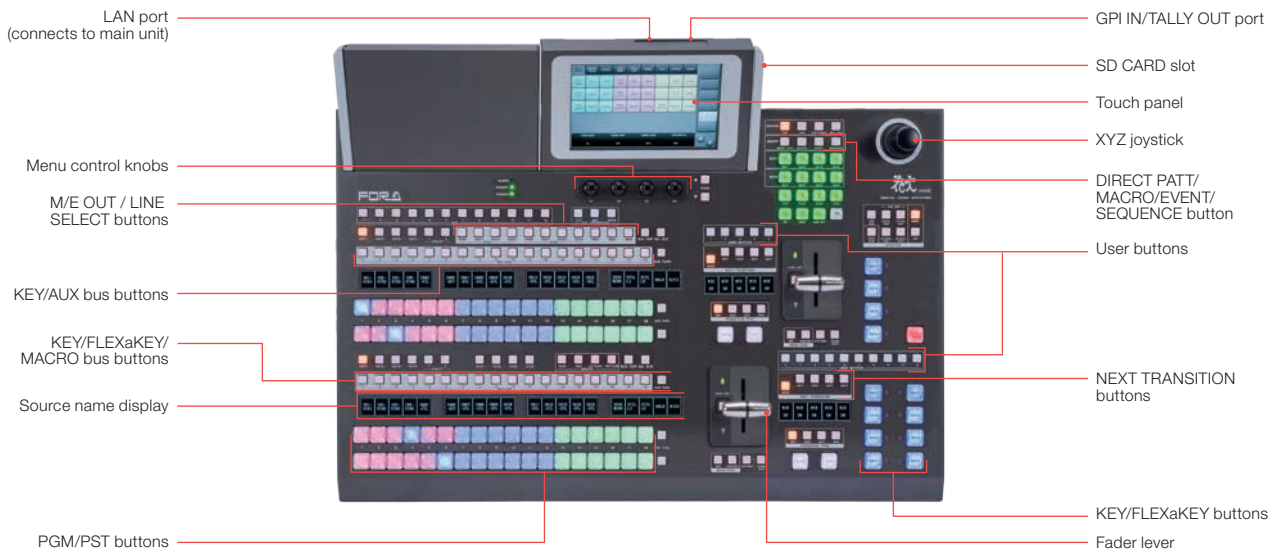
■ External Interfaces

Interfaces include: GPI IN (19 inputs); GPI IN/TALLY OUT (22 outputs); Alarm output (cooling fan, power): RS-422 (for editing or other interfaces); and Ethernet (for control from a computer). GPI ports on the operation unit also support up to six inputs and six outputs.
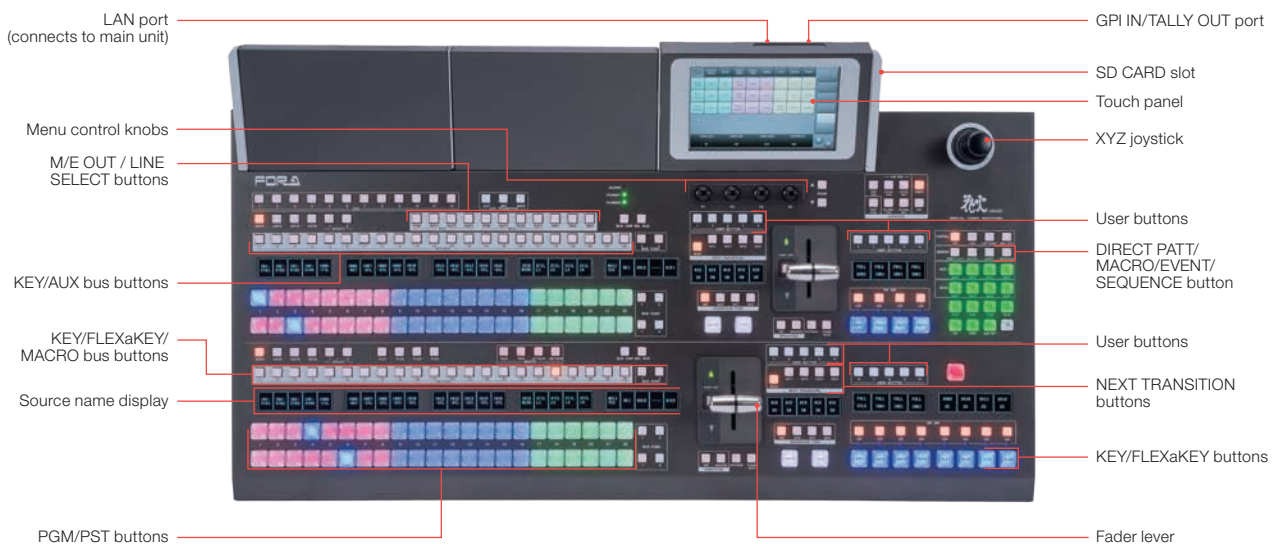
Convenient Control Panels

Choose from HVS-491OU, HVS-492ROU, HVS-492OU or HVS-492WOU panels to suit your application.

Advantages of all the control panels include: enhanced usability and accurate control through customizable RGB button lights assigned to specific video material or button functions; an OLED display for material, a 7-inch touch panel, source and macro name display, and more.

There is also direct input via a three-axis (XYZ) joystick, menu control knobs, and a keypad. A range of functions can also be assigned to user buttons in convenient locations on the control panel. Use an SD card to load or save configuration files and stills. Remote setup, control, and previews are possible via the switcher's internal Web server.

HVS-491OU 1 M/E (12 buttons) Control Panel

HVS-492ROU 2 M/E (12 buttons) Control Panel

LAN port
(connects to main unit)

GPI IN/TALLY
OUT port

SD CARD
slot

DIRECT PATT/
MACRO/EVENT/
SEQUENCE button

XYZ joystick

Touch panel

Menu control
knobs

M/E OUT
select buttons

Source name display

KEY/FLEXaKEY/
AUX bus buttons

User buttons

PGM/PST buttons

NEXT TRANSITION
buttons

KEY/FLEXaKEY buttons

Fader lever

LAN port
(connects to main unit)

GPI IN/TALLY
OUT port

SD CARD slot

Touch panel

XYZ joystick

DIRECT PATT/
MACRO/EVENT/
SEQUENCE button

Menu control
knobs

M/E OUT / LINE
SELECT buttons

KEY/AUX bus
buttons

User buttons

Source name
display

KEY/FLEXaKEY/
bus buttons

NEXT TRANSITION
buttons

KEY/FLEXaKEY buttons

PGM/PST buttons

Fader lever

HVS-492OU 2 M/E (18 buttons) Control Panel

LAN port
(connects to main unit)

GPI IN/TALLY OUT port

SD CARD slot

Touch panel

XYZ joystick

Menu control knobs

M/E OUT / LINE
SELECT buttons

DIRECT PATT/
MACRO/EVENT/
SEQUENCE button

User buttons

KEY/AUX bus buttons

KEY/FLEXaKEY/
MACRO bus buttons

Source name display

NEXT TRANSITION
buttons

PGM/PST buttons

KEY/FLEXaKEY buttons

Fader lever

HVS-492WOU 2 M/E (22 buttons) Control Panel

LAN port
(connects to main unit)

GPI IN/TALLY OUT port

SD CARD slot

Touch panel

XYZ joystick

Menu control knobs

M/E OUT / LINE
SELECT buttons

User buttons

DIRECT PATT/
MACRO/EVENT/
SEQUENCE button

KEY/AUX bus buttons

User buttons

KEY/FLEXaKEY/
MACRO bus buttons

NEXT TRANSITION
buttons

Source name display

KEY/FLEXaKEY buttons

PGM/PST buttons

Fader lever

Options

Expansion cards

HVS-49AES

Digital Audio I/O Card

Supports four lines (eight channels) of balanced or unbalanced audio input and output.

HVS-49DVE

2.5D DVE Expansion Card

Supports eight channels of DVE output as standard at 1080/59.94p and 50p. With a single card, DVEs are available for all keyers and FLEXaKEYs when 1080/59.94p, 50p and 4K formats are used.

Other options

HVS-1200ED

Editor Interface Software

Adds support for protocols used for editing on other video systems (BVS/DVS, GVG).

HVS-49SSD240G

SSD Expansion Option

SSD for storing stills and clips.

HVS-TALOC32/TALR32

Tally Interface Unit

Connects up to five of the following half-rack tally units to a single HVS-1200.
- HVS-TALOC32: Open-collector, 32 contacts
- HVS-TALR32:   Relay, 32 contacts

HVS-49PSM/49PSO

Redundant Power Supply Unit

HVS-49PSM provides a redundant power supply for HVS-1200. HVS-49PSO is available for the HVS-492ROU, HVS-492OU or HVS-492WOU.

HVS-AUX16A/AUX32A/AUX64A

AUX Remote Control Panel

16- and 32-button models are 1U size, and 64-button models are 2U. Up to 12 AUX units can be connected via Ethernet. Expand switcher versatility by assigning AUX source previews or a variety of functions to each button.

HVS-AUX16A

HVS-AUX16C
16-button model with display

HVS-AUX32A

HVS-AUX64A

HVS-AUX16B

Tabletop AUX Remote Control Panel

A 16-button tabletop AUX remote control panel.

HVS-AUX16B

HVS-AUX16D
16-button model with display

Accessories

AC cord, EIA rack mount brackets, CD-ROM(OU user manuals(PDF)), quick setup guide