MULTI FORMAT DIGITAL PRODUCTION SWITCHER KM-H3000

ExtTri 720p   50
RefIn Format Freq

PUSH

PUSH

PUSH

KEY1   KEY2   KEY3

BKGD

INPUT 8/
MEDIA 2   SHIFT

DISS   WIPE   DVE

KM-H Series
Multi-format digital production switchers

KM-H3000E   KM-H3000U

KM-H2500E   KM-H2500U

JVC
The Perfect Experience

KM-H3000

Multi-format digital production switcher

Memory/menu

- Memory access keys for quickly recalling memory sets from one of the ten available memories
- Menu and Next keys activate and navigate the menu

Menu display

- Easy to read screen for clear menu display
- Three rotary/push button controls, offering simple parameter selection
- Intelligent 'menu follows function' feature

Wipes/menu

- Instant access to transition types, each modifiable via the menu system
- Wipe modifiers include vertical and horizontal multipliers and wipe rotation
- Color borders, softness, aspect ratio, also controlled by menu system
- Buttons allow easy access to memory functions, providing ten individual function stores

Key/DVE selection

- Auto select chooses the input's key
- Exceptionally high-quality chroma keyer
- DVE dual picture-in-picture keyer

Key selection

- Activates source selection for Key 2 and Key 3, and the three aux busses, via the Key/Aux bus

Key/Aux Bus

- Key input selection bus
- Auxes can be used to send a number of different sources to other equipment, such as on-set monitors, slow motion servers, replay servers, waveform monitors, video servers, etc.

Program Bus

- Enables direct selection of program output, with active source lighting
- Accesses media stores for still images and animations

Preset Bus

- Selection of next background
- Also AUX PGM, AUX PREV and AUX CLN (clean) selection buttons for aux outputs

Transition type

- Direct access to dissolve, wipe or DVE transition

Transition element

- Change any combination of video layers simultaneously
- Preview output always shows an accurate representation of the next scene

KM-H3000E   KM-H3000U

KM-H2500E   KM-H2500U

USB interface

- USB port for uploading still images and animations
- Allows easy software updates
- Saves switcher system configuration

Positioner

- Durable positioner for rapid 2D DVE and wipe positioning

MULTI FORMAT DIGITAL PRODUCTION SWITCHER KM-H3000

er: 1.0.0.1304
i/50

PUSH   PUSH

KEY1   KEY2   KEY3

WIPE   DVE

AUTO TRANS

KEY1 TRANS

KEY2 TRANS

KEY3 TRANS

T-bar & indicator

- Multi-LED fader progress bar (zinger) displays the transition direction and progress
- Assists in setting fader limits
- Robust, reliable and easy-to-use metal fader

Key transitions

- Easy independent cut or dissolve of keyers

10 Window Multi-Viewer

Any input can be routed to any window. PVW / PGM can be displayed in large or small windows with labels. Red (on air) or Green (preview) tally indication.

Powerful Keying

TODAY'S WEATHER   08.30

TRAVEL NEWS COMING UP

High quality chroma key with DVE, lower third and graphic overlay

KM-H2500

Perfect for entry-level applications, the KM-H2500 shares the features and facilities of the KM-H3000 with the following exceptions:

- Six multi-definition SDI inputs
- Two keyers
- No positioner, so Wipe and DVE positioning set via knobs
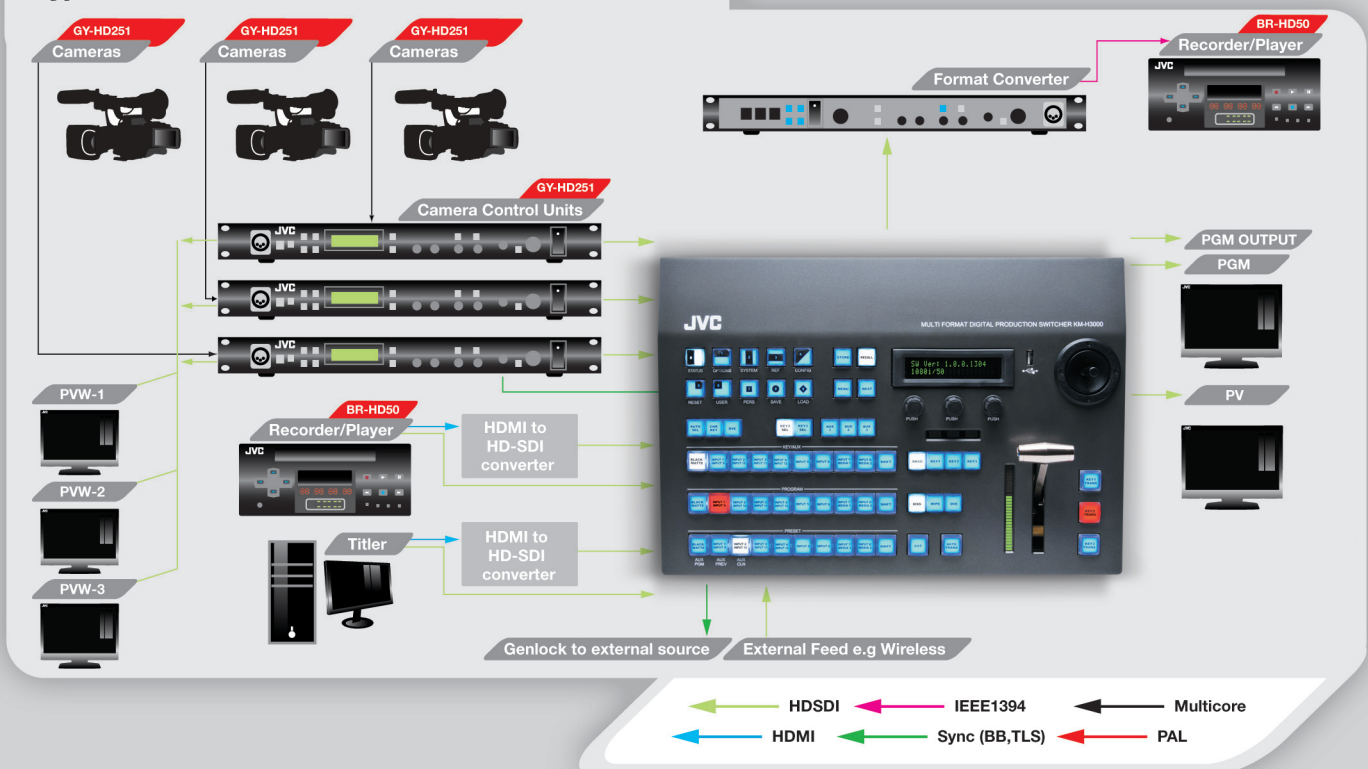
The heart of the studio

Unlike other switchers that ship with only basic functionality, KM-H Series switchers come fully equipped with all inputs, chroma key, animation stores and frame synchronizers, with no need to purchase further optional components to enjoy full functionality.

Fitting perfectly with JVC's philosophy of providing an affordable upgrade path to High Definition production, the KM-H Series digital production switchers are the ideal companion for systems incorporating GY-HD250 series multi-function cameras and DT-V series HD monitoring solutions.

Feature summary

- Twelve (six on KM-H2500) multi-definition inputs, 480i, 576i, 720p, 1080i 50/60Hz
- 10 window multi-viewer
- Three keyers (two on KM-H2500)
- Four inputs with frame synchronizers
- Four up/down converters
- Two 2D DVEs with crop and resize functionality
- Two internal media store sources with animation support
- Floating high quality chroma keyer
- Sync generator with three independently timed outputs

Typical studio architecture with KM-H3000

GY-HD251 Cameras

GY-HD251 Cameras

GY-HD251 Cameras

BR-HD50 Recorder/Player

Format Converter

GY-HD251 Camera Control Units

PGM OUTPUT

PGM

PVW-1

BR-HD50 Recorder/Player

HDMI to HD-SDI converter

PV

PVW-2

Titler

HDMI to HD-SDI converter

PVW-3

Genlock to external source   External Feed e.g Wireless

| HDSDI ← | IEEE1394 ← | Multicore ← |
| HDMI ← | Sync (BB,TLS) ← | PAL ← |

With full-functionality built-in to the KM-H2500 and KM-H3000 production switchers, there's no need to buy expensive options. The only additional accessories are:

Desktop mount for studio use - Recessed mounting in the desk ensures the switcher remains securely mounted, and vented, especially when used in an OB van.

Redundant power supply - JVC's offering of redundant power is a rare and valuable feature for such affordable digital switchers, ideal for live events and critical applications.

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SD or HD?

Shouldn't your production switcher handle both?

ULTI FORMAT DIGITAL PRODUCTION SWITCHER KM-H3000

Ver: 1.0.0.1304
0i/50

PUSH   PUSH

KEY1 KEY2 KEY3

WIPE DVE

AUTO
TRANS

KEY1
TRANS

KEY2
TRANS

KEY3
TRANS

If you haven't already made the move to HD, chances are you will at some point in the future. As the heart of a small television studio or in playout, venue and OB applications, new JVC KM-H Series multi-format digital production switchers deliver flexibility, reliability and affordability – with the added benefit of being able to handle both SD and HD video signals.

The KM-H3000 is a powerful 12-input, 3-key SD/HD-SDI switcher, while the KM-H2500 is a 6-input, 2-key model ideal for entry level applications. Both feature a robust, single-piece metal construction for desktop or optional in-desk/rack-mount operation, high-end push buttons and a robust T-Bar; all designed to handle the physical challenges of mobile and flight-case use.

Both switchers feature an intuitive, traditional panel layout and a simple menu structure, and are very easy to set-up and use. Buttons are user adjustable to any brightness and hue for easy viewing in darkened environments, allowing the user to fully customize the appearance of their own unit. High quality chroma keying and sophisticated dual animation playout capability ensures that the KM-H switchers will satisfy the most demanding of applications.

Key Features

- Twelve (six on KM-H2500) multi-definition SD/HD-SDI inputs 480i, 576i, 720p, 1080i 50/60Hz
- Three keyers (two on KM-H2500)
- Four inputs feature frame synchronizers
- 10 window multi-viewer
- Four up/down converters
- Two 2D DVEs with crop and resize functionality
- Robust full metal single-piece design with professional buttons and T-bar
- Two internal media store sources with animation support
- One pattern generator with circle and pattern rotation
- One wash generator
- One floating high quality chroma keyer
- Six SD/HD-SDI outputs; 2 program, preview, Aux 1, Aux 2 and Aux 3
- Sync generator with three independently timed outputs
- Remote control using RS422 and 24 GPI inputs
- Ten memories, eight tallies
- Optional desk/rack-mount frame
- Optional redundant power supply

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Specifications

KM-H3000/2500

Multi-Definition

Standard Definition*	480i/59.94, 576i/50 (all at 4:3 and 16:9)
High Definition	1080i/59.94, 1080i/50, 720p/59.94, 720p/50

Input

Inputs	(KM-H3000) - 12 SDI Multi-Definition
	(KM-H2500) - 6 SDI Multi-Definition
Frame Sync	4
Reference	Black Burst, Tri-Level Sync (internally terminated)
Input Connectors	BNC
Color Signalling	Y:Cb:Cr 4:2:2, 10 bit
Signal Interface	SMPTE 292M
Signal Loss	>15dB, 5 MHz to 1.5GHz

Output

Outputs*	6 SDI Multi-Definition + 1 analog
Output Types	2 x PGM, 1 x Preview, 3 x Aux (w/clean feed),
Reference	3 independently adjustable outputs with
	Genlock Black Burst and Tri-Level Sync
	Internally or externally locked
Signal Interface	SMPTE 292M
Signal Loss	> 15dB, 5 MHz to 1.5 GHz

Interfaces

Tally Support	8 (D-sub 9 connector)
Editor Interface	1 (D-sub 9, RS-422)
General Purpose Interface	24 input (1 x D-sub 25 connector)
Ethernet Management Interface	10/100Mbps (RJ45 connector)
Media Interface	USB 2.0

Attributes

Source Buttons	(KM-H3000) - 10
	(KM-H2500) - 6
User Adjustable Panel Glow	Yes
Matte Background Color Generator	Yes
Wash/Graduation	Yes (2 colors)
Dissolve	Variable transition rate
Keyers	(KM-H3000) - 3
	(KM-H2500) - 2
Transition Methods	Fader, Auto, Cut, GPI, Editor
Key Source and Fill	Input, Matte, Wash, Media Store
Key Types	Self, Linear, Chroma, PIP
Chroma Key	Yes
Picture in Picture	Yes
Wipe Patterns	10
Circle Wipe	Yes
Digital Video Effects	2D
Aux Buses	3
SD/HD Up/Down Conversion	Yes
Internal Still and Animation Stores	2
Display	VFD
Menu Control	3 push button knobs
Positional Joystick	(KM-H3000 only) - Professional grade

Operating Environment

Power	100-240V AC
Redundant Power	Optional
Temperature	7-40ºC (45-104ºF)

Mechanical Specifications

Panel Dimensions (WxDxH) mm	404 x 272 x 122
Mounting Options	Desktop, Rack, In-Desk
Construction Material	Robust Metal
Weight	(KM-H3000) - 4.17 Kg (9.2 lbs)
	(KM-H2500) - 3.95 Kg (8.7 lbs)

KM-H3000

KM-H2500

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