



KM-H Series

Multi-format digital production switchers

KM-H3000

KM-H2500

JVC

The Perfect Experience

SD or HD?

Shouldn't your production switcher handle both?



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 mixer, 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 digital mixers 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 reading in darkened environments, allowing the user to fully customise 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 HD-SDI inputs
480i, 576i, 720p, 1080i 50/60Hz
- Three keyers (two on KM-H2500)
- Four inputs feature frame synchronizers
- 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 HD-SDI outputs; 2 program, preview, Aux 1, Aux 2 and Aux 3
- One analogue composite (NTSC/PAL) output
- Sync generator with three independently timed outputs
- Remote control using RS422 and 24 GPI inputs
- Ten memories, eight tallies
- Optional desk mount frame

KM-H3000

Multi-format digital production switcher

Wipes/menu

- Instant access to transition types, each modifiable via the menu system
- Wipe modifiers include vertical and horizontal multipliers and wipe rotation
- Colour 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 selects the input's key
- Exceptional quality chroma keyer
- DVE dual picture-in-picture keyer for interviews

Key selection

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

Key/Aux

- 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

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

Preset

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

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



Transition type

- Direct access to dissolve, wipe or DVE transition

KM-H3000

KM-H2500

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

IP: 1.0.0.1304
i/50

PUSH PUSH

KEY1 KEY2 KEY3

WIPE DVE

AUTO TRANS

KEY1 TRANS

KEY2 TRANS

KEY3 TRANS

Transition element

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

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, guaranteed for life

Key transitions

- Easy cut or dissolve of keys



London



Beijing

BREAKING NEWS...

| 08.00

Two 2D DVEs, featuring lower third and background graphic



TODAY'S WEATHER

| 08.30

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 keys
- No positioner, so Wipe and DVE positioning set via knobs



The heart of the studio

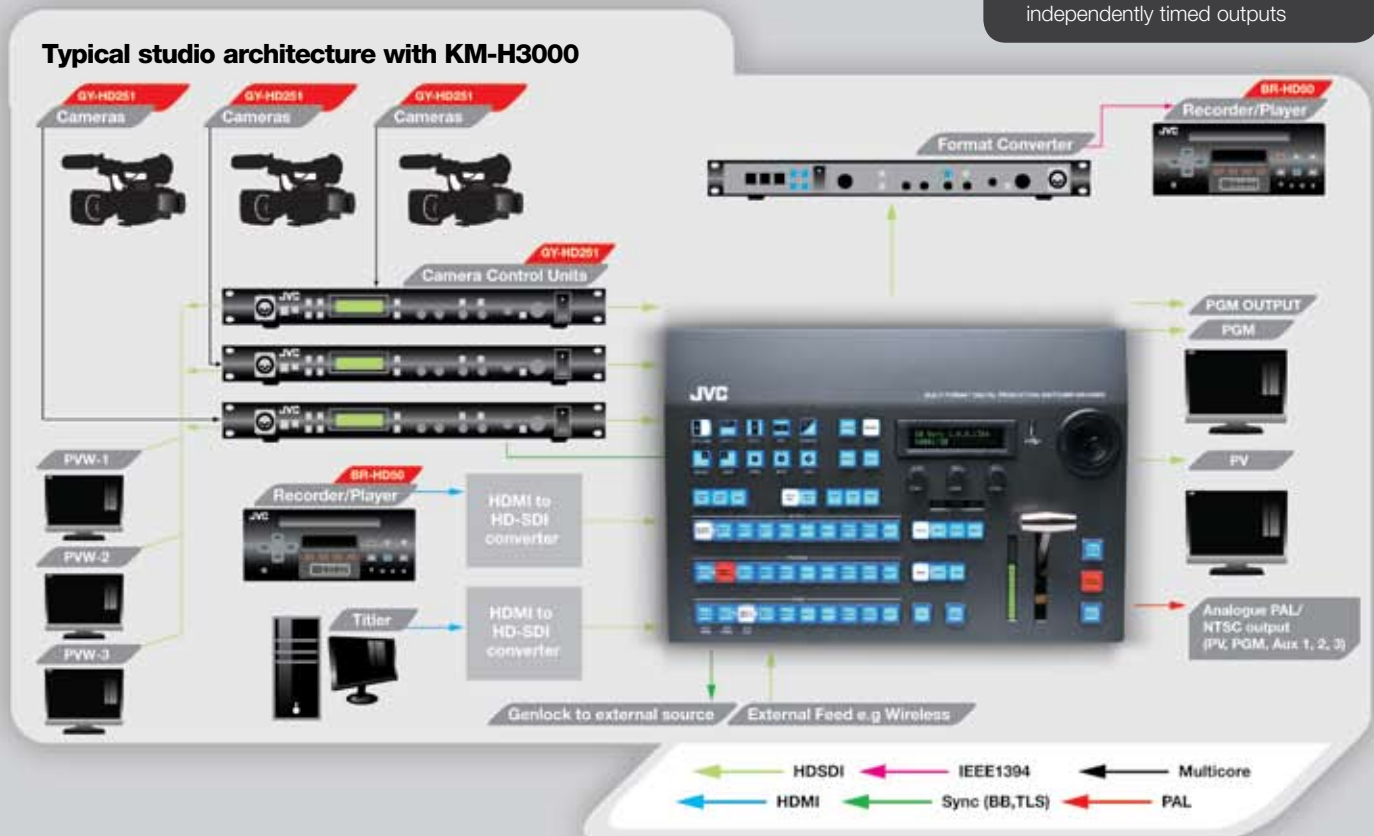
Unlike other switchers that ship with only basic functionality, KM-H Series switchers come fully equipped with all inputs, chroma key, animation stores and frame synchronisers, with no need to purchase further optional components.

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 multirole cameras and DT-V series HD monitoring solutions.

Key features

- Twelve (six on KM-H2500) multi-definition inputs 480i, 576i, 720p, 1080i 50/60Hz
- 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
- Six HD-SDI outputs; 2 program, preview, Aux 1, Aux 2 and Aux 3
- One analogue composite (NTSC/PAL) output
- Sync generator with three independently timed outputs

Typical studio architecture with KM-H3000



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 mixer remains securely mounted, 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 mixers - ideal for live events.

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
Option	SD only model available (upgradeable to MD)

Input

Inputs	(KM-H3000) - 12 SDI MultiDefinition (KM-H2500) - 6 SDI MultiDefinition
Frame Sync	4
Reference	Black Burst, Tri-Level Sync (internally terminated)
Input Connectors	BNC
Colour Signaling	Y:Cb:Cr 4:2:2, 10 bit
Signaling Interference	SMTPE 292M
Signal Loss	>15dB, 5 MHz to 1.5GHz

Output

Outputs	6SDI MultiDefinition = 1 analogue
Output Types	2 x PGM, 1 x Preview, 3 x AUX (w/clean feed), 1 x down-converted analogue NTSC/PAL
Reference	3 x Genlock Black Burst, Tri-Level Sync Internally or externally locked
Signaling Interference	SMTPE 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 (on frame)

Attributes

Source Buttons	(KM-H3000) - 10 (KM-H2500) - 6
User Adjustable Panel Glow	Yes
Matte Background Color Generator	Yes
Wash / Graduation	Yes (2 colours)
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 knobs
Positional Joystick	(KM-H3000 only) - Professional grade

Operating Environment

Power	100-240V AC
Redundant Power	Optional
Temperature	0-35°C (32-95°F)

Mechanical Specifications

Panel Dimensions (WxDxH) mm	404 x 272 x 122
Frame Dimensions (WxDxH) mm	483 x 660 x 889
Frame Rack Usage	2 RU
Control Panel Mounting Options	Desktop, Rack, In-desk
Construction Material	Robust Metal
Weight	(KM-H3000) - 9.2 lbs (4.17 Kg) (KM-H2500) - 8.7 lbs (3.95 Kg)



• KM-H3000



• KM-H2500