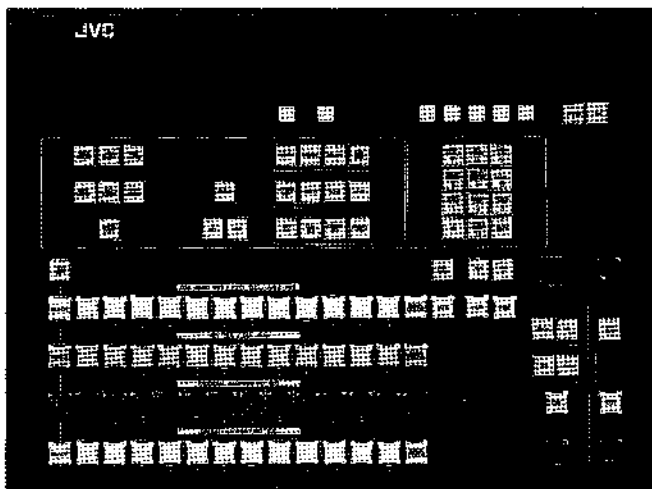


# Multi-format Component Digital Vision Mixer

## KM-5000E



- Exceptional picture quality from component digital processing (CCIR Rec 601 4:2:2 digital format)
- Four different Input modules available for various applications: component analogue, component parallel digital (Rec 656), component serial digital (Rec 656), and composite analogue (PAL)
- Up to 14 primary inputs are possible, including colour bar and back colour (input modules optional)
- Up to 7 busses (KEY, PGM, PST, DSK, DSK BKGD, AUX1, AUX2) (AUX1 AND AUX2 Optional)
- Three slots for PGM output
- 16-event memory
- Serial Interface for VTR editors (RS-422A)
- 2-unit modular design: main unit and control unit
- 6 colour matte generators
- DVE Interface possible
- Liner key processing
- All Input chroma key for KEY and DSK (Standard)
- Priority change capability between KEY and DSK
- Border generator : Border, Shadow, Outline for KEY and DSK (Standard)
- Auto Digital Input phase correction ( $\pm 64 \mu\text{S}$ )



### Video System

Television standard	625/50
Digital video paths	8-bit resolution
Digital key paths	8-bit resolution
Digital mixer:	10-bit x 9-bit mixer with 18-bit precision: dither added to round to 8-bit out
Overall delay input/ programme output	3 line <delay <4 line
Signal processing video	4:2:2 in conformity with CCIR601

### Inputs

12 primary video inputs	
Analogue component (option):	EBU standard level Y: 1.0 Vp-p Pb: 0.7 Vp-p Pr: 0.7 Vp-p 3 x BNC 75 ohms
Parallel digital (option):	CCIR-656 parallel component 1 x D-sub 25-pin
Serial digital (option):	CCIR-656 serial component 1 x BNC 75 ohms
Analogue composite (option):	PAL-VBS 1.0 Vp-p 1 x BNC 75 ohms
6 external key inputs	
Analogue key (option):	VS 1 Vp-p or key 0.7 Vp-p and sync 0.3-4.0 Vp-p  (switchable) 2 x BNC 75 ohms
Parallel digital (option):	CCIR-656 parallel component 1 x D-sub 25-pin
Serial digital (option):	CCIR-656 serial component 1 x BNC 75 ohms
Autophasing range:	+62.5 $\mu\text{s}$ (delay) -64.0 $\mu\text{s}$ (advance)
Gen-lock	
Composite analogue:	B.B. 0.45 Vp-p $\pm 30\%$ 75 ohms or loop through

### Outputs

Programme output (3 slots available for PGM)	
Preview output (1 slot available for PVW)	
Analogue component (standard):	EBU standard level Y 1.0 Vp-p Pb 0.7 Vp-p Pr 0.7 Vp-p level 2 outputs per 1 module 6 x BNC 75 ohms
Serial digital (standard):	CCIR-656 serial component 3 outputs per 1 module  3 x BNC 75ohms
Parallel digital (option):	CCIR-656 parallel component 2 outputs per 1 module 2 x D-sub 25-pin
Analogue composite (standard):	VBS 1.0Vp-p 2 outputs per 1 module 2 x BNC 75 ohms
Key output (1 slot available)	
Analogue (option):	Y 1.0 Vp-p 1 x BNC 75 ohms
Serial digital (option):	CCIR-656 serial component 3 x BNC 75 ohms
Parallel digital (option):	CCIR-656 parallel component 2 x D-sub 25-pin
Aux-1,-2 outputs (each 1 slot available)	
Analogue component (option):	EBU standard level Y: 1.0 Vp-p Pb: 0.7 Vp-p Pr: 0.7 Vp-p 2 outputs per 1 module 6 x BNC 75 ohms
Serial digital (option):	CCIR-656 serial component 3 outputs per 1 module 3 x BNC 75 ohms
Parallel digital (option):	CCIR-656 parallel component 2 outputs per 1 module 2 x D-sub 25-pin
Analogue composite (option):	VBS 1.0 Vp-p 2 outputs per 1 module 2 x BNC 75 ohms

### Interface

12 tally outputs	dry contact or voltage supply (selectable) terminal
4 GPI inputs	input:TTL with optocoupler control for M/E, DSK, FTB, KEY, PRIORITY EXCHANGE
4 Serial communication ports	
Control unit:	RS-422 or RS-232C D-sub 9-pin
Editor:	RS-422 or RS-232C D-sub 9-pin
Audio:	RS-422 or RS-232C D-sub 9-pin
External:	RS-422 or RS-232C D-sub 9-pin

### Analogue component inputs/outputs

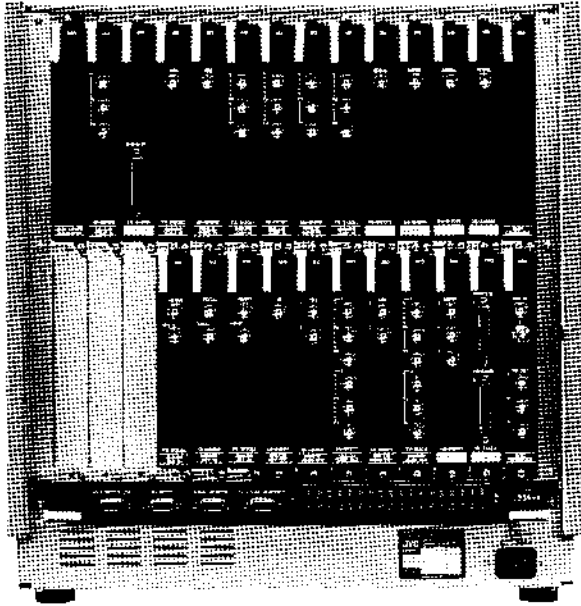
Frequency response	Y: 100 kHz to 5.75 MHz $\pm 0.5$ dB Pb/Pr: 100 kHz to 2.75 MHz $\pm 0.5$ dB
S/N (p-p/ma)	Y: 56 dB (200 kHz to 5 MHz)
Y/Pb/Pr timing	less than 25 ns

### General

Power requirement:	
Main unit	200 V to 240 V AC $\pm 10\%$ 50/60 Hz
Control unit	100 V to 240 V AC $\pm 10\%$ 50/60 Hz
Power consumption:	
Main unit	max. 220 W
Control unit	max. 30 W
Operating temperature	
5°C to 40°C	
Humidity (relative): 10% to 90% (noncondensing)	
Weight	
Main unit	30.0 kg
Control unit	7.3 kg
Dimension (W x H x D)	
Main unit	482 x 456.5 x 563 mm
Control unit	482 x 83 x 355 mm

# KM-5000E

COMPONENT DIGITAL  
**4:2:2**



The KM-5000E mainframe is equipped as standard with 3 output modules, KM-BK5011E (analogue component output), KM-BK5012E (analogue composite output) and the KM-BK5013E (digital serial output). Also included are, 6 colour generators, 1 black/test pattern generator, 1 back colour generator and a sync generator. Any of the optional modules can be installed in the mainframe. The mix and number of these modules can vary according to your requirements.

The mixer has a maximum capacity of the following slots:  
12 inputs,  
6 key in,  
3 programme out,  
1 preview out,  
2 auxiliary out,  
1 key out.

**KM-BK5001**

Analogue component input module



**KM-BK5002**

Analogue composite input module



**KM-BK5003**

Digital serial input module



**KM-BK5004**

Digital parallel input module



**KM-BK5005**

Analogue key input module



**KM-BK5011**

Analogue component output module



**KM-BK5012**

Analogue composite output module



**KM-BK5013**

Digital serial output module



**KM-BK5014**

Digital parallel output module



**KM-BK5015**

Analogue key output module

