V-800HD MKII | MULTI-FORMAT VIDEO SWITCHER   VER 1.5

SCALING
The scalers let you make settings independently for every input source. With these, you can take input sources of different resolutions and adjust to any sizing and resolution including odd-sized LED walls. You can freely scale digital, analog RGB, and component sources.

MEMORY
You can save eight sets of panel settings in each of eight banks, for a total of 64 sets. Pre-saving complex settings in this way lets you call them up instantly when they're needed.

USB PORT
Store up to 16 still images imported from a USB memory device.

AUX BUS
New selector switch on AUX bus. It is possible to output a completely different image from the main bus switching image. You can send the image after the position adjustment by the scaler from the switch on the front panel in a cut change.

INPUT
You can assign video sources to cross-points in any order you like instead of having to use the numerical order of the connectors on the rear panel. This lets you reorder and shift video feeds when sudden changes in camera lines or differences in format create blanks between cross-points.

PINP/KEY/DSK
In addition to the newly designed Picture-in-Picture (PinP), Luminance Key, Chroma Key, and DSK for 4:4:4/10-bit input, you can also use an External Key.
* DSK cannot be used during External Key operations.

TRANSITION
The simple design makes selecting a transition pattern as easy as pressing an icon-marked button. You can also set the length of transition times precisely, using either seconds or frames.

RGB/COMPONENT OUTPUT
Accommodate projectors and other video devices that accept only analog input. Built-in scalers let you specify resolutions that differ from the main output resolution.

DVI-I/HDMI INPUT
A slider switch selects either DVI-D or DVI-A. Support for HDMI is also possible through use of a simple HDMI/DVI adapter. Supports HDCP input.

COMPOSITE INPUT
The V-800HD MK II lets you use four analog composite inputs.

RGB/COMPONENT INPUT
Using a conversion cable lets you input analog component signals in addition to VGA type output from a computer.

SDI INPUT
Supports three formats of digital video signals: 3G, HD, and SD.

SD OUTPUT
This provides a constant down-scaled composite signal regardless of the main output resolution.

MULTIVIEWER OUTPUT
Monitor your active input sources along with Program and Preview.

DVI-D/HDMI OUTPUT
The V-800HD MK II is equipped with two DVI-D/HDMI outputs for connecting displays/projectors and is HDCP-compatible.
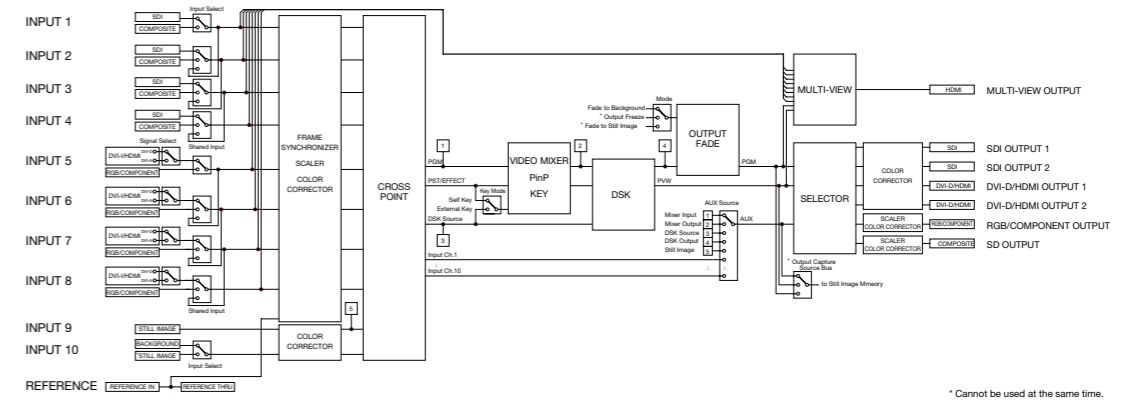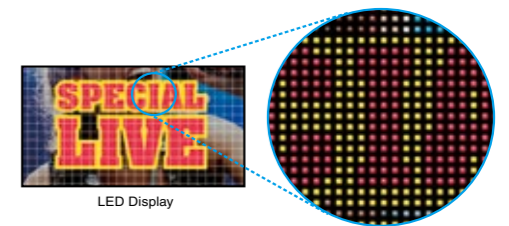
SDI OUTPUT
Two SDI outputs are provided supporting 3G, HD, and SD signals.
* 3G-SDI Level A/Level B compatible

Updated Version of the Industry Standard Multi-Format Video Switcher

- Up to 16 inputs, 8 cross points (4 SDI/Composite + 4 DVI-I/HDMI)
- 6 Simultaneous output (2 SDI + 2 DVI + RGB + Composite)
- Dedicated multi-view monitor output
- High quality 4:4:4/10 bit processing
- 1080p/i, WUXGA processing

- Frame Sync & Scaler on all inputs and outputs
- 3G, HD, SD 3-mode SDI (3G-SDI Level A/B compatible)
- HDCP Compatible
- Two active still images from sixteen still memories
- AUX bus switch

BLOCK DIAGRAM

* Cannot be used at the same time.

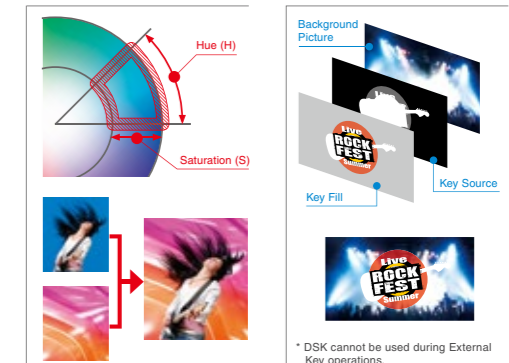## 4:4:4/10-bit Internal Processing

The V-800HD MK II uses 4:4:4/10-bit internal signal processing. This lets you achieve compositing and output with no reduction in high-detail RGB signals driven from a computer. The result is a sharp, unblurred display of video and text, even on large screens and LED displays. The V-800HD MK II delivers high image quality for all uses, from live broadcasts to event displays.

LED Display

Crisp output per pixel

Newly Developed Key-compositing Engine

Along with the upgraded internal signal processing, a newly developed keyer is included. Chroma Key lets you adjust phase range, amount of chroma, and other parameters based on HSV color space that is closely related to human chromatic saturation. This allows you to achieve high quality and tight chroma key compositing even when using 1080p video sources. What's more, the V-800HD MK II can accept an External Key. This attractively composites colorful CG titles and gradation/transparency clips, enabling you to achieve visual effects that are even more impressive.

Hue (H)
Saturation (S)
Key Fill
Background Picture
Key Source

* DSK cannot be used during External Key operations.

SPECIFICATIONS V-800HD MKII

VIDEO PROCESSING

Processing		4 : 4 : 4 (Y/Pb/Pr, RGB), 10-bit
Supported Formats	Video	480/59.94i, 576/50i, 480/59.94p, 576/50p, 720/59.94p, 720/50p, 1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p
		*SDI and Composite input can input the same frame rate as a setup menu setting.
	PC	640×480/60Hz (*1), 800×600/60Hz (*1) (*3), 1024×768/60Hz (*1), 1280×768/60Hz (*1), 1280×1024/60Hz (*1), 1366×768/60Hz (*1), 1400×1050/60Hz (*1), 1600×1200/60Hz, 1920×1080/60Hz, 1920×1200/60Hz (*2), *Conforms to VESA DMT Version 1.0 Revision 10 *1 Output refresh rate is 75 Hz when frame rate is set to 50 Hz *2 Reduced blanking *3 When Reference is set to External, the resolution of 800 x 600 and refresh rate of 60 Hz are no longer compliant with the VESA standard. This means that display on some devices may not be possible in this situation.
	Still	Windows Bitmap File (.bmp) *Maximum 1900 x 1200 pixels, 24-bit per pixel, uncompressed

INPUT/OUTPUT LEVEL AND IMPEDANCE

Composite	1.0Vp-p 75Ω
Analog HD/RGB	0.7Vp-p 75Ω (H, V:5 VTTL)

INPUT CONNECTORS

3G/HD/SD-SDI		BNC type×4 *Conforms to SMPTE 424M (Level-A, Level-B), 292M, 259M-C
DVI-I/HDMI		DVI-I type×4 *Select DVI-A or DVI-D/HDMI using switch per channel
Analog Video	HD	Component (Mini D-sub 15-pin type) x 4 *Combined use with Analog RGB
	SD	Composite (BNC type) x 4 *Select Composite or SDI using menu per
Analog RGB		Mini D-sub 15-pin type x 4 *Combined use with Analog Video (HD) *Select DVI-D/HDMI or Analog RGB using menu per channel

OUTPUT CONNECTORS

3G/HD/SD-SDI		BNC type x 2 *Conforms to SMPTE 424M (Level-A, Level-B), 292M, 259M-C
DVI-I/HDMI		DVI-I type x 2, HDMI x 1 (for multi-view monitor)
Analog Video	HD	Component (Mini D-sub 15-pin type) x 1 *Combined use with Analog RGB
	SD	Composite (BNC type) x 1 *Combined use with Analog Video (HD) *Does not synchronize with Reference Input.
Analog RGB		Mini d-sub 15-pin type x 1 *Combined use with Analog Video (HD)

OTHER CONNECTORS

Tally	Mini D-sub 15-pin type x 2 *Input (max): 12 V, 200 mA Open collector Type
Reference	BNC type (IN, THRU) *Black Burst (Sync to frames), Bi-Level, Tri-Level
MIDI	5 pin DIN type (IN, OUT/THRU)
RS-232	D-sub 9 pin type x 1
USB port (host)	A type x 1 (for USB memory)

EFFECTS

Transition	Mix, Cut, Wipe (9 patterns)
Composition	PinP, DSK, Chrominance Key, Luminance Key, External Key
Others	Output Fade, Output Freeze

OTHERS

Power Supply	AC 115 V, AC 117 V, AC 220 V, AC 230 V, AC 240 V (50/60 Hz)
Power Consumption	75W
Dimensions	482 (W) x 275 (D) x 116 (H) mm 19 (W) x 10-7/8 (D) x 4-5/8 (H) inches * When rack mount angles are fitted.
Weight	5.5kg
Operating Temp.	+0 to +40 degrees Celsius, +32 to +104 degrees Fahrenheit
Accessories	Owner's Manual, Power cord, Rack-mount angle x 2