Picture Quality at the Pinnacle of High Definition.
Eight Multi-Format Channels with Independent Scalers.
A Variety of Output Formats including a Built-in Multiviewer.
Stellar Image Quality at 1080p (3G-SDI)

Supports 1080p video signals at bit rates as high as 3 Gbps — twice the rate of conventional HD. Asserts all the vividness of high-realism, high-detail camera and computer sources.

Interlaced (1080i)

Progressive (1080p)

True Multi-format Performance

There's no need to convert the input source to match the video output format. The built-in scalers up-convert and down-convert any video source to the optimal resolution.

Freely switch between 1080p video that surpasses even broadcast quality. Full support not just for camera video, but for computer output as well - at a full range of resolutions. A new-generation multi-format switcher featuring high-quality built-in scalers on all inputs.
Full Range of Connectivity

The V-800HD supports a large number of input formats, from analog to digital, with all the necessary connectors. The SDI connectors accommodate 3G, HD, and SD. The DVI-I connectors pull full duty for DVI-D, DVI-A and even HDMI using a simple HDMI/DVI adapter. The Mini D-Sub 15 pin type connector accommodates SD/HD component as well as computer input via RGB.

8 Input (4 SDI/Composite + 4 DVI-I/HDMI/RGB/Component)
6 Output (2 SDI + 2 DVI-D/HDMI + RGB/Component + Composite)
4:4:4/10-bit Internal Processing
1 M/E (Key, PinP) + DSK
Built-in frame synchronizers and scalers on all inputs
SDI support: 3G, HD, and SD
DVI-D / RGB / HDMI support
Input status LEDs
HDCP support
Live access to two still-image sources
10 assignable cross-points
Multiviewer monitor output

*An HDMI/DVI adapter is required.
**4:4:4/10-bit Internal Processing**

The V-800HD 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 delivers high image quality for all uses, from live broadcasts to event displays.

**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 sensation. This allows you to achieve high quality and tight chroma key compositing even when using 1080p video sources. What’s more, the V-800HD 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.

**Multiviewer Output for Source Monitoring**

The multiviewer output allows you to monitor the status of all input sources plus the Program and Preview outputs. The convenient HDMI connector enables the use of a readily available and affordable monitor.

- Use an HDMI monitor that supports HDCP and 60p signals.
- SDI and composite inputs are displayed at the original source frame rate.
- DVI-i/HDMI and RGB/Component inputs are displayed using a reduced frame rate.
- Changing the channel cross-point assignments changes the order of displayed sources.
- Still images imported from USB memory are not displayed on the source monitor.

**Built-in HDCP Mode**

When playing back a Blu-ray disc that contains commercial content or digital broadcast programming, the digital output is encoded using HDCP (High-bandwidth Digital Content Protection), which is one means of copyright protection. This means that switchers that are not HDCP-compatible will not display or pass-through such video content, even in cases where permission for use in a live event was obtained from the copyright holder. To resolve this problem, the V-800HD features a dedicated mode that officially supports HDCP. A panel indicator lets you check the operating state when the unit is in the HDCP mode.

- In HDCP mode, no video signals are output from the analog or SDI connectors.
- The display or projector connected to a digital output must be HDCP-compatible as well.
Simultaneously use a wide range of cameras, from broadcast-grade equipment equipped with HD-SDI output to HDMI-output consumer equipment and even digital single-lens reflex (DSLR) cameras. This lets you configure a highly effective system using your existing equipment, at a lower cost, and without the need for external converters.

Up to 16 still images can be stored in the unit. This makes for instant reading of images for telops, flip cards, as well as logos and other graphics.

Monitor all input sources using a single computer display.

Video played back from a computer can be adjusted by the internal scalers to the final output resolution, regardless of the original resolution.

The V-800HD can switch up to four 1080p 3G-SDI sources and four DVI. This makes it possible to create a fully progressive system delivering high image quality.

Feed house audio from the mixing console along with an HDMI video feed to the VC-30HD for live streaming.

Simultaneously use sources with a diverse range of formats, from analog to digital.

Video can be output in a variety of formats via analog RGB or component outputs. This lets you transmit video to stage wings or green room without having to use splitters or converters.

A downscaled composite output is constantly available making recording/archiving the event, simple and easy.

Four DVI-I and four Mini D-Sub 15 pin type connectors allows up to eight PC/Mac feeds ideal at academic conferences and other events that involve a large number of computer sources. Use Memory banks to switch between configurations using the same numbered DVI and RGB connectors.

Using the HDCP mode makes it possible to utilize third-party HD sources in performances.*

* Commercial use of third-party content requires the permission of the copyright-holder.
High-end Performance for Every Situation
A superior, easy-to-use interface that achieves a rich array of video effects

SCALING
Scalers You Can Use Any Way You Like
The V-800HD features scalers that 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.

USB MEMORY
USB Port for Importing Still Images
The V-800HD can store up to 16 still images imported from a USB memory device.

MEMORY
Memory Banks Supporting Worry-free Configuration Recall
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.

Assignable Cross-points For the Layout You Want
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 (Down Stream Keyer)
A Full Range of Keyers
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.

VIDEO FAADER
Large, Easy-to-use T-bar
The V-800HD uses a large T-bar that is ideal when you're mixing video manually. Its firm feel gives you confident control when performing slow transitions.

TRANSITION
Carefully Selected Transition Patterns
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.

■ PinP (Picture in Picture)
■ DSK (Downstream Keyer)
DVI-I/HDMI Input
Up to WUXGA, 1080p
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
Up to 480i or 576i
The V-800HD lets you use four analog composite inputs.

RGB/COMPONENT Input
Up to WUXGA, 1080p
Using a conversion cable lets you input analog component signals in addition to VGA type output from a computer.

SDI Input
Up to 1080p
The V-800HD supports three formats of digital video signals: 3G, HD, and SD.

RGB/COMPONENT Output
Up to WUXGA, 1080p
The V-800HD can accommodate projectors and other video devices that accept only analog input. What’s more, the built-in scalers let you specify resolutions that differ from the main output resolution.

SD Output
Up to 480i or 576i
This provides a constant down-scaled composite signal regardless of the main output resolution.

SDI Output
Up to 1080p
Two SDI outputs are provided supporting 3G, HD, and SD signals.

Multiviewer Output
1080/60p with HDCP
Monitor your active input sources along with Program and Preview.
* Use an HDMI monitor that supports HDCP and 60p signals.
* SDI and composite inputs are displayed at the original source frame rate.
* DVI-I/HDMI and RGB/Component inputs are displayed using a reduced frame rate.

COMPOSITE Input
480i or 576i
The V-800HD lets you use four analog composite inputs.

RGB/COMPONENT Input
Up to WUXGA, 1080p
Using a conversion cable lets you input analog component signals in addition to VGA type output from a computer.

SDI Input
Up to 1080p
The V-800HD supports three formats of digital video signals: 3G, HD, and SD.

MIDI Control
You can use MIDI to interlink the V-800HD with other products including the Roland V-Mixing system and even another V-800HD.

Operation in Tandem with an Audio Mixer
Connect the V-800HD to an audio mixer console to achieve a true “audio follows video” solution. When you take a video source live, you can have the audio level instantly recalled.

Achieving Switching for 3D Video
Operating two V-800HD units in tandem makes it possible to perform switching for 3D video split into two left and right video signals.

MIDI Control Connectors
Controllable using MIDI and RS-232C

MIDI/RS-232C Connectors
Controllable using MIDI and RS-232C

Reference Connectors
The V-800HD features a reference input for external synchronization. This lets you use the V-800HD in combination with existing production-studio system equipment.

Multi-Zoom
Using the shared input function, you can assign the video on channel 1 to channels 2 through 4 and the video on channel 5 to channels 6 through 8. The scaler for each input can zoom into any position in the video image enabling a virtual multi-camera environment. This gives the appearance that you have additional cameras connected.

* Only the source of the previous adjacent channel can be shared.
Specifications

**Video Processing**

**Processing**
- 4:4:4 (YPbPr, RGB), 10-bit
- 4:2:2 (Y/CbCr, Y/CrCb), 10-bit
- 4:2:0 (Y/CbCr, Y/CrCb), 10-bit
- RGB, Y/CbCr, Y/CrCb

**Supported Formats**
- PC

**Video**
- 480i/540i, 480p/576p, 576i/625i, 720p/50p, 720p/52p, 1080i/50i, 1080i/60i, 1080p/50p, 1080p/60p
- *The SDI input can input the same frame rate as a setup menu setting.*

**Input Connectors**
- BNC type x 4 * Select DVI-A or DVI-D/HDMI using switch per channel

**Output Connectors**
- DVI-D/HDMI
- DVI-D type x 2, HDMI x 1 (for multi-view monitor)
- BNC type x 2  * Conforms to SMPTE 424M (Level-A), 292M, 259M-C

**Analog RGB**
- Mini D-Sub 15-pin type x 4  * Combined use with Analog Video (HD)
- Component (Mini D-Sub 15 pin type) x 4  * Combined use with Analog RGB

**Analog Video**
- Component (Mini D-Sub 15 pin type) x 4  * Combined use with Analog RGB
- Mini D-Sub 15-pin type x 4  * Combined use with Analog Video (HD)

**Reference**
- BNC type (IN, THRU)  * Black Burst (Sync to frames), Bi-Level, Tri-Level

**Power Consumption**
- 75 W

**Dimensions**
- 482 (W) x 274.6 (D) x 115.9 (H) (mm) / 19 (W) x 10-13/16 (D) x 4-13/16 (H) (inches)
- *1* When rack mount brackets are attached.
- *2* Rack mount size.
- 5.5 kg / 12 lbs 3 oz

**Accessories**

Roland Systems Group

MIDI Visual Control is an internationally-used recommended practice that was added to the MIDI specification so that visual expression could be linked with musical performance. MIDI equipment that is compatible with MIDI Visual Control can be connected to electronic musical instruments via MIDI in order to control video equipment in tandem with a musical performance.

Using V-LINK, musicians can “play” video from their electronic instrument when used with Roland video products. With V-LINK, musicians have a powerful interface for realtime audio and video integration.

Ensuring high quality while protecting the environment: Roland is ISO9001 and ISO14001 certified

At Roland, several group companies have obtained ISO9001 certification. In addition, in January 1999, Roland also received ISO14001 international environmental management system certificate. We are actively seeking ways to maintain harmony with the environment. ISO(International Standardization Organization: an organization for the promotion of standardization of international units and terms. They actively seek ways to maintain harmony with the environment. ISO(International Standardization Organization: an organization for the promotion of standardization of international units and terms. They promote the use of uniform units and terms in the fields of science and technology. They actively seek ways to maintain harmony with the environment. ISO(International Standardization Organization: an organization for the promotion of standardization of international units and terms. They actively seek ways to maintain harmony with the environment.

Copyright 2012 Roland Corporation. All right reserved. Roland is either registered trademark or trademark of Roland Corporation in the United States and/or other countries. Company names and product names appearing in this document are registered trademarks or trademarks of their respective owners. It is forbidden by law to make an audio recording, video recording, copy or revision of a third party’s copyrighted work (musical work, video work, broadcast, live performance, or other work), whether in whole or in part, and distribute, sell, lease, perform, or broadcast it without the permission of the copyright owner. Do not use this product for purposes that could infringe on a copyright held by a third party. We assume no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this product. All specification and appearances are subject to change without notice.

Printed in Japan, Mar. 2012 RAM-20028 GEN-PD