



## Roland V-600UHD

ProdCode: ROLV600UHD

4K HDR Multi-format Video Switcher



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### Features

- 4K HDR Multi-format Video Switcher
- 4K without compromise
- High Dynamic Range [HDR]
- Full 60Hz frame rate
- A more vivid colour space
- 10-bit 4:4:4 pixel-accurate colour
- Support for DCI cinema 4K resolution
- The right I/O for your show
- Capture all the action with a single 4K camera
- Get creative with composition
- Integrate with the audio system
- The best solution for working with LED Displays

## **Upgrade your events to 4K HDR — One input at a time**

As clients and audiences start demanding 4K at events, your current HD sources and displays shouldn't become obsolete—and the V-600UHD lets you transition to 4K workflows as demand and budgets allow. With Roland's Ultra Scaler technology, scaling is provided on every input, so you can use Full HD and 4K sources simultaneously, and output at multiple resolutions. You can also leverage the high pixel density of 4K camera sources in Full HD workflows for problem-free, visually-impressive productions.

## **System Program Version 3.0**

The free Version 3.0 update adds support for 2160p/29.97 Hz and 2160p/25 Hz frame rates, providing more flexibility with various camcorders and other devices. In addition, a new user button option makes it possible to switch between Program and Aux for easier output monitoring.

## **4K Without Compromise**

Upgrading to 4K greatly improves the image quality in your productions, so why compromise with switchers that may deliver more pixels but omit the true capabilities of 4K?

## **High Dynamic Range [HDR]**

The V-600UHD uses High Dynamic Range [HDR] so your events look amazing. You don't just see more pixels, you see better, more dynamic-looking pixels that preserve the details in the darkest and brightest areas of an image. HDR provides well-balanced stage lighting without oversaturation for IMAG (and it's easier to achieve compared with using SDR.) And SDR dynamic range signals can also be input and switched with the V-600UHD.

## **Full 60Hz Frame Rate**

With full 60Hz framerate support, the V-600UHD delivers a smooth, crisp video image without the blur that's common when fast motion is displayed at 30Hz refresh rates.

## **A More Vivid Colour Space**

The V-600UHD supports Rec.2020, the highest-specification Wide Colour Gamut

(WCG), as well as RGB and Rec.709 standards to display the widest range of visible colours. This provides an increased level of realism and improved colour accuracy, especially for red and yellow colour ranges.

### **10-bit 4:4:4 Pixel-accurate Colour**

Internal 10-bit Colour Depth processing reduces colour banding and sharpens high-detail sources from computers. This makes it easier to read small fonts and other fine details, even when drastically scaled and magnified.

### **Support for DCI Cinema 4K Resolution**

Not all 4K content has the same aspect ratio. Although 4K content is always 2160 pixels high, DCI or “Cinema 4K” is 4096 pixels wide, which is 256 pixels wider than UHD. The V-600UHD lets you switch and display content at the originally intended aspect ratio, without cropping or letterboxing.

### **The Right I/O for Your Show**

The V-600UHD has four HDMI 2.0 and two 12G SDI inputs, perfect for events needing several computer and video playback sources complete with IMAG camera support. Each input independently supports input and scaling of HD, Full HD, UHD 4K, and DCI 4K, as well as PC resolutions from UXGA to DCI 4K — with no converters needed. AUX destination switching makes it easy to include down-stage confidence monitors, while the configurable multi-view monitor lets you see all your sources, programs and previews — at a glance. Each output also supports downscaling to Full HD for outputting to streaming encoders or other HD-equipped destination displays.

### **Capture All the Action with a Single 4K Camera**

You don't need multiple cameras for multiple shots. If your production requires a wide shot of the stage, a medium shot of the speaking panel, and close-ups of each speaker, the V-600UHD has you covered with built-in Region of Interest [ROI]. This allows you to point a single 4K camera at the stage and use the V-600UHD's input sharing and scaling functions to crop out up to eight “camera shots” that you can assign to the V-600UHD's cross points. Increase your production value without increasing your camera count, complexity or costs.

### **No Camera Operators Required**

“Automatic ROI” is a technology-assisted 4K to HD camera workflow blending facial tracking technology with Roland's multi-shot Region Of Interest. When paired with Canon's XF705/400/405 cameras, two of the V-600UHD's Region Of Interest windows

automatically pan, tilt, and zoom to follow two people within the scene, generating dynamically smooth camera shots, no camera operators required. Setup is straightforward, requiring one HDMI cable and one LAN cable.

## **Get Creative with Composition**

The V-600UHD supports two Picture-in-Picture windows (PnP) that offer so much more than simple fixed inset windows. You can accomplish results comparable to dedicated screen processors, with fully customizable aspect ratios, sizes and input source scaling — letting you display whatever you want, wherever you want it. Combine flexible PnP with the ultra-wide pixel count of DCI 4K to create engaging and impressive screen sets.

## **Integrate with the Audio System**

Embedded audio from digital video signals can be tricky to incorporate into audio systems at an event or performance. Superior audio management lies at the heart of the V-600UHD, with flexible 24-bit 48kHz audio processing that lets you avoid problems before they occur. You can de-embed audio from the currently selected source and send to an external sound mixer using Audio Follows Video. Or program audio returning from the same console can also be embedded in one or all video outputs and then sent to the web, a recorder or overflow room.

## **Multiple PTZ & Remote Camera Control**

When LAN based, PTZ cameras are called into action, take control using the V-600UHD. Seamlessly integrate JVC, Panasonic, Sony, PTZ Optics, Avonic, and VISCA compatible professional pan-tilt-zoom (PTZ) robotic cameras to streamline workflow without needing a dedicated controller.

[More Detail](#)

## **The Best Solution for Working with LED Displays**

LED display technology has quickly become a versatile creative tool for event designers, whether serving as the background for a stage or a huge backdrop at a music festival. The challenge is that when using IMAG cameras with a bright LED background and an SDR switcher, it's difficult to light a presenter or performer when standing in front of the LED — they just appear as a shadowy outline. But now you can easily work with low light stages and bright backgrounds; just use an HDR camera with the V-600UHD and the subject appears properly lit.

Corporate events and festivals use pixel widths that exceed the HD format's 1920

pixels. With the V-600UHD's support for DCI Cinema 4K Resolution, you can switch content to display images up to 4096 pixels wide, fulfilling the creative vision of ambitious event designers. The V-600UHD offers incredibly high-quality "dot-by-dot" output scaling that allows you to directly connect to an LED display controller at the exact pixel dimensions, without the extra expense and increased latency of a dedicated scaling processor.

