

# Roland VR-5

It's an all-in-one video and audio mixer and live streaming device with built-in touchscreen preview and output LCDs. **NIGEL JOPSON** plugs in.



Considering how much live audio can fit in one small laptop, it may surprise audio pros how dependent video remains on hardware boxes. VJ mixing can be done with software, but when a couple of live cameras are involved a lot of iron needs to be deployed: video switcher, preview and output monitors, audio mixer with adjustable delay, some form of media player and Genlock — a time base corrector/frame synchroniser — is essential for glitch-free work with several cameras. Often a conference or show is just too long to make postproduction work cost-effective, and although it's never been easier to manufacture a DVD or internet-stream an event, the actual business of capturing live video and audio in sync remains tricky. Into the breach steps Roland with its VR-5 all-in-one video and audio mixer and live streaming device, with built-in touchscreen preview and output LCDs.

The audio mixer has 6 inputs on faders: 2 mono from XLR (with +48v phantom) or jacks with adjustable gain preamps and LCR panning, 3 stereo line inputs on phono from camera mics to faders, and one stereo from a built-in SD card media player. A rotary knob controls audio level from the minijack PC input. The camera audio inputs can be selected to follow camera select buttons (muting other camera audio) with the Audio Follow button. The screen-based setup menu can remove camera audio from this group: useful for larger events, where it might be handy to constantly have audio from a fixed-position wide camera microphone available on fader, even if video output was selected to a close-up camera. This flexibility also allows unused camera audio inputs to be employed for any type of playback device. Additional sound control is available via the Audio Setup button, which puts setting adjustments on the preview touchscreen.

For the mic inputs there's a HPF (ineffectual), noise gate (helpful attack and release times), and boost/cut bass and treble (useful wide-range shelving). 'Mastering Effects' available on the final audio output include a noise gate, harmonic enhancer (dreadful) and Master Lo/Hi. The manual states the last of these is for 'correcting distortion', although the subjective effect is of a gentle bass and treble

shelving boost. I would gladly have swapped all of these for a simple brick-wall limiter with adjustable attack/release. This is a glaring omission from the otherwise sensible audio features, a control that would be welcome for even the simplest of conference-style events, where the challenge of first-delegate-speaking-

too-loud/second-oblivious-of-mic-location remains a perennial problem. A useful audio delay for lip sync is accessed via the System, rather than Audio, menu. The camera ins and video outs on the back are composite via BNC (with BNC-to-phono conversion plugs supplied), with S-Video connectors beneath taking priority if used. In addition to dual composite outputs there is an HDMI output, but sadly only to 576/50p (or 480/59.94 when set to NTSC) resolution. There's also a preview video out, although connecting many additional screens rather defeats the purpose of the VR-5 concept. Switching between cameras and media player can either be done via buttons, or on the touchscreen. Transitions can be instantly button-selected between cut, mix and wipe. I found the dissolves a little abrupt on their default settings, but they're easily tuned via the Video Mix screen menu. A PC-Select button switches to the 15-pin D-type RGB input, with some cool alternative use of this input provided via the Key On button — Chroma-key or Luminance compositing — selectable to either foreground or background channel and variable colour chroma.

The VR-5 can superimpose a graphic or chart from the PC on the video output; Chroma effect is the trick where movie characters are extracted from their blue-backdrop and placed in front of a previously filmed clip. The VR-5 keyer is downstream, so the superimposed image can be kept in place while switching video sources. The newly released V1.03 software-update for the VR-5 also enables the computer input to use the Picture-in-Picture effect — useful for a conference, for example — where a presentation slide could have a P-in-P camera view of the presenter explaining it, or vice versa. I did find my 15-inch laptop screen unexpectedly resized to 10-inch when plugged into the VR-5 (although this was via a DVI-RGB adaptor), emphasising how important it is to test-connect all equipment likely to be used before going live!

The P-in-P/Split Screen effect can be instantly selected via four buttons in the centre section. Cleverly, the onscreen location and size of the P-in-P can be adjusted by touching on the output screen and dragging, or touching and turning the value dial to grow/shrink the frame. The SD card media player

really helps obtain professional results from an event, MPEG-4 video clips, JPG and BMP images and WAV or MP3 audio files can be quickly chosen via the File Select buttons and cued up in the preview window. Live shows will inevitably have slack moments while talent is positioned or stages are rearranged, and firing off a preproduced clip offers the chance to make the

final video more polished. Roland has included the facility to add or jump-to markers on the SD-stored video. This would, for example, enable previously recorded video interviews to be marked up and spun-in at appropriate spots: as the road crew set the stage, cue the chosen segment of an earlier interview with the next band's vocalist as Picture-in-Picture. The record button will instantly record video and audio to an MPEG-4 file (markers can be inserted on-the-fly), with a default file name taken from the internal clock.

I found the VR-5 extremely easy to operate, and Roland has included many handy features that show it has really thought about the challenges faced at a live event. Quick to operate rotary audio master and video fade to black/white controls are grouped adjacent to a User Logo button — this instantly switches the output to a preselected image from the SD card — avoiding embarrassing blank output screens. Next to this control group is the VR-5's killer feature: the USB output for internet streaming. No driver is required on PC or Mac computers, any video software that accepts a standard webcam input via USB will be able to connect the VR-5, which outputs 720 x 576 pixel video and 16bit/44.1kHz audio.

This means the VR-5 can easily connect to any streaming service like Ustream.tv or Livestream.com — even Skype or iChat — and this worked seamlessly on both the Windows and Mac computers I tested it with. The one feature I really wished for was another SD card slot next to the streaming output, with a single record button. Nearly all video streaming applications (like Ustream Producer) have the ability to record to disk as well as broadcast ... but we all know what network connected laptops can behave like sometimes. So if a backup recording is required, it means either not using the VR-5's built in media player or lugging around an external hard-drive or DVD recorder, which rather spoils the all-in-one concept!

Overall, the VR-5 has sufficient inputs and outputs, and adds just enough effects and offline features, to be a versatile portable video production device for streaming online events. There's even a Kensington laptop security slot on the back panel. Roland would do well to reassess the price point of the unit in the UK, however, as it's no longer the only game in town: Datavideo has a composite device with similar features for about £1000 less, and Panasonic recently introduced a mixer at a similar price point with HD/SD inputs and outputs, although neither have the USB streaming connector of the VR-5. ■

**PROS** Everything you need to stream a live event on the internet, in one handy package.

**CONS** Recent affordable mixers from other manufacturers make the VR-5 look a little expensive.

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