



Roland VR-120HD

ProdCode: ROLVR120HD

Direct Streaming AV Mixer



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Features

- Direct Streaming AV Mixer
- Powerful live production automation with sequencing, macros, and scene memories
- Built-in streaming encoders for transmitting two livestreams at rates up to 1080p/60 FPS
- Record streams directly to an SDXC card for archiving, editing, and distribution
- Six 3G SDI inputs with frame rate converters
- Six 1080p HDMI inputs with frame rate converters and real-time scalers
- Support for cinema and broadcast frame rates
- Eight-layer video effects engine
- Eight total outputs: three SDI, three HDMI, USB-C streaming, and a dedicated direct streaming output
- Seven selectable output modes: Program, Sub-Program, Aux, Preview, and three Multi-View options
- 42-channel digital audio mixer with advanced effects and processing
- 16-slot still store function supports screen capture or uploaded BMP, JPEG, and PNG images with alpha channel in the internal non-volatile memory
- Enhance your livestreams with sound effects, still images, and video sources stored on an SDXC card

- Audio Player function with eight trigger pads and onboard storage for 16 audio files
- PTZ control for 12 cameras with support for multiple brands and mixed protocols
- Large seven-inch touch screen with graphical menu
- Extensive device control with Bluetooth, USB, RS-232, and LAN
- Remote control software available for iPad, macOS, and Windows
- Wireless and wired camera tally support

Version 2.0: New Features

- Graphics Presenter support—This free, easy-to-use software for Windows computers elevates your live productions with stunning graphics.
- New Chroma Key Engine—Upgraded keyer algorithms allow for more precise composition in real time.
- SRT Input and Output—Enables secure video and audio transmission over LAN/internet connections.
- Additional Aux Buses—There are now three total Aux buses for both video and audio, providing more flexibility in system configurations.
- iPad Video Monitoring and Switching—Full control is now available using the iPad Remote app and many of the latest iPad models with USB-C.
- External PTZ Control Enhancements—You can now adjust pan, tilt, and zoom for each camera and assign/recall presets from a USB numeric keypad.

One Operator, Multiple Audiences

With the VR-120HD Direct Streaming AV Mixer, a single operator can confidently manage hybrid live and online productions without the need for external gear and the staff to run it. Offering extensive audio and video I/O, a large touchscreen, and hands-on controls, this portable powerhouse gives you the tools you need to take on any mid-level production. Advanced Roland AV features make difficult tasks simple with customizable workflows, deep automation functions, remote PTZ camera control, one-touch macro sequencing, streaming over LAN and USB, and much more.

Create Custom Experiences for Live and Online Audiences

The VR-120HD's flexible video capabilities let you handle the diverse presentation needs of events as they happen. Assign sources to eight cross-points on the fly, including live video inputs, still images, and video clips. Prioritize cameras and/or computer sources with scene recall. And create custom feeds for live and online viewers by assigning composition layers to multiple busses as needed.

HDMI and SDI Inputs

The VR-120HD supports both HDMI for common A/V devices and SDI for long cable runs and high-end cameras. Seamlessly combine six HDMI sources and six SDI sources in Full HD with a range of broadcast and cinematic frame rates and color spaces. All HDMI inputs feature built-in scalers with EDID and HDCP support, eliminating connection hassles with client-provided sources like computers, tablets, smartphones, gaming consoles, and legacy 4:3 devices.

Integrated Playback of Stills and Video Clips

Enhance events with onboard support for graphics and video playback. Call up still images during transitions between presenters, display graphics for breaks, and use PNGs to create dynamic lower thirds. The integrated video player lets you trigger video clips directly from the SDXC card, with no need to connect an external playback device.

Layers and Keyers

Video effects and graphics are must-haves to bring polish and excitement to productions. The VR-120HD's effects engine features eight composition layers that can be assigned to the Program, Sub-Program and Aux outs, so you'll always keep

audiences engaged with visually appealing content. With up to four picture-in-picture windows and two downstream key layers with transparent PNG and external key support, you can manage the creative needs of any client. For example:

Layers 1-2

Start with mixable live background video layers.

Layers 3-6

Place four picture-in-picture layers or chroma/luminance key effects. **Layers 7-8**

Add two downstream keyers with support for fill and key inputs.

Versatile Video Outputs

With multiple assignable outputs—including three SDI and three HDMI outputs, a USB-C streaming output, and ethernet streaming—the VR-120HD puts a high-end video matrix at your command. Feed program displays, auxiliary monitors, multi-view producer displays, and the online audiences at once, complete with a clean output left over for recording the presentation to an SDXC card.

Professional-Class Digital Audio Mixing

The VR-120HD boasts the most powerful audio capabilities of any video switcher in its class, saving the expense of a dedicated mixer and sound engineer. You have 42 channels of audio control, complete with a host of processing tools, I/O routing options, and automation features.

Multi-Channel Analog and Digital Audio Inputs

The VR-120HD features six balanced audio inputs with XLR/1/4-inch combination jacks, high-quality mic preamps, and phantom power. Four RCA inputs are on hand for standard line-level devices, and you can also mix embedded digital audio from the HDMI, SDI, and USB inputs. Bluetooth is available as well for streaming audio from a mobile device.

Powerful Mixing Tools

Set up direct control for your most important sound feeds with eight assignable faders. And when you have multiple presenters to deal with, engage Auto Mixing to lighten your load and ensure that the mix between microphones remains balanced. You can set specific inputs to take priority when someone starts to speak, and other audio levels are automatically reduced as needed.

A Mix for Each Audience

Two auxiliary audio busses let you set up unique mixes for a variety of applications. For example, you can feed a monitor system for stage performers while livestreaming a specialized mix that's independent of the in-person program. Versatile routing allows you to freely assign the mix and aux busses to the two stereo XLR outputs, RCA stereo output, USB and stream/record outs, or HDMI or SDI outputs.

Shape Your Sound

The VR-120HD combines the full power of the latest digital audio consoles with expansive Roland effects. EQ and dynamics processing is provided for every input and output, and high-quality reverb is available for music applications and special effects. You also get specialized tools to quickly handle audio issues, like automatic anti-feedback for stage mics and adaptive noise reduction to suppress background noise and hum.

Audio On Demand

With the VR-120HD's unique Audio Player section and eight assignable pads, it's simple to enhance events with custom sounds. With a quick press, you can trigger sound effects, event announcements, countdowns for e-sports, or theme songs when presenters take the stage—the sky's the limit.

Ethernet and USB Streaming and Onboard Recording

Clients demand smooth, worry-free broadcasts, and the VR-120HD's advanced technology makes livestreaming to the most popular platforms smoother than ever before. With support for both direct streaming over ethernet and computer streaming over USB, you can deliver high-quality presentations to any audience. And with simultaneous SDXC recording, it's easy to capture the show for later distribution.

Secure and Reliable Streaming Over LAN

With the VR-120HD's powerful LAN streaming capabilities, you can directly connect to Twitch, Facebook, and other platforms without the need for a computer. The Adaptive Bitrate function monitors the quality of the network connection and automatically adjusts the streaming rate to reduce interruptions due to bandwidth issues. An adjustable Safety Delay is also available, allowing you to confidently stream unscripted events and prevent offensive content from being broadcast.

Dual LAN Streaming Destinations

Encode and broadcast ethernet livestreams to two independent channels on the same platform to reach a wider audience. Or use the second channel to capture a local backup in real time. It's even possible to use a mobile phone with a 4G or 5G data plan as the primary streaming connection or a redundant backup.

USB-C Streaming Up to 60 FPS

Stream to any audience in Full HD to a computer via USB. The USB-C connection offers the same plug-and-play technology as webcams,* so you can begin streaming immediately with Zoom, Microsoft Teams, or any platform that can use a webcam as its source.

*USB video class (UVC) and USB audio class (UAC) compliant. YUY2 (uncompressed) and Motion JPEG (compressed) formats supported.

SDXC Card Recording

With the VR-120HD's onboard recorder, you can easily record an event to an SDXC card and provide your client with an H.264 MP4 video file* for their editing and distribution needs. Stereo WAV audio can also be recorded independently for podcasts and other audio-driven media. It's even possible to capture still images to internal memory from any video output bus and save them to the card for later use.

*The recording bitrate is the same as the livestream encoding bitrate.

Take Full Control of Your Productions

The VR-120HD provides immediate control of essential functions with hardware knobs, faders, and buttons. And with the seven-inch touch display, you have fast access to deeper parameters and settings. Scene memory, macro, and sequencing features make your workflow even smoother, letting you pre-program complicated actions and fire them off with simple actions during the event.

Fast Recall of Complex Compositions

Storing and recalling custom looks can be accomplished with just a few button presses. The 32 scene memories and advanced effects engine work together to provide seamless changes, including synchronizing the transition of all composition layers at the program output. The 100 macros go even deeper, allowing you to build and execute complex action lists that include switching, DSK on/off, audio mixing adjustments, PTZ camera movements, and much more.

Sequencing Magic

The VR-120HD's sequencer makes scene memories and macros even more

powerful, letting you perform perfectly timed cues with ease. Up to 1000 steps can be recorded in the sequencer, and each step can include both presets and macros. Set up your cues ahead of time in the sequence list and trigger them in order for a stress-free production.

Automated Switching and Mixing

When there are many stage presenters, you need to follow the action and switch audio and video together. The automated video switching and audio mixing features in the VR-120HD make this complicated task simple, greatly easing your workload and creating a smooth experience for the audience.

PTZ Camera Support

Robotic PTZ (pan-tilt-zoom) cameras eliminate the need for multiple operators, provide enhanced broadcast-quality coverage, and can be placed in discreet locations thanks to their small size. The VR-120HD features integrated support for select Canon, JVC, Panasonic, Sony, PTZOptics, Avonic, and VISCA-compatible PTZ LAN cameras. Mix and match different brands as you like and operate up to 12 PTZ cameras simultaneously.

Deep Remote-Control Options

The VR-120HD supports extended workflows with dedicated software apps and a variety of remote devices.

- The free VR-120HD Remote app for iPad connects via Bluetooth, allowing you to wirelessly operate functions at events via a portable touch interface.*
- Use the free VR-120HD Remote Control Software to operate the switcher from a Mac or Windows computer.*
- Connect footswitches or expression pedals to execute over 100 different switcher commands.
- Trigger start/stop on Atomos recorders over HDMI.
- Set up a tally light with Roland's Smart Tally or the rear-panel hardware connector.
- Seamlessly integrate with system installations via the RS-232 and TALLY/GPIO DB-sub connectors.

*Coming in Q3 2023.

