

VR-1HD

AV STREAMING MIXER

REAL ENGAGEMENT IN REALTIME

If you're a content creator seeking maximum engagement, livestreaming outperforms uploaded video by a significant margin; audiences are larger, watch for longer and post more comments. Roland's VR-1HD lets you broadcast dynamic multi-camera livestreams, complete with amazing picture and sound that easily outshines 'standard' livestreams from a mobile phone or static webcam. Whether you're a creator, gamer, commentator or presenter, it's the easy way to livestream with high production standards. And since you're going to get more comments, ensure they're good ones with the VR-1HD.

YOUR 'PLUG AND PLAY' BROADCAST STUDIO

The VR-1HD has three "worry-free" HDMI inputs, and each one accepts a variety of HD and computer-based video resolutions. This lets you connect, switch and stream different sources including cameras, presentations, gameplay and even smartphones and tablets without having to think about it. The audio from these sources can be blended with the two studio-quality XLR microphone inputs and dedicated line input. Best of all, as the VR-1HD is designed for live broadcasting, its dedicated controls and top-mounted mic input (with gooseneck mic) let you go hands-free and headset-free while livestreaming.



SWITCH TO SUPERIOR LIVESTREAMS

When preparing a video for uploading, your editing software can add some impressive layering options, including professional transitions that make 'live-switched' videos look boring by comparison. The VR-1HD has built-in Scene Switching to instantly jump between scenes that contain preset arrangements of layered sources, displayed within customizable inset windows. Set-up the scenes in advance and recall them via the five scene preset buttons, to make your livestreaming way more interesting.



The **VR-1HD RCS software** is designed to control the VR-1HD using a computer. By connecting the VR-1HD to your computer via USB, you will be able to copy settings (backup) or update the system software of the VR-1HD in addition to remote controlling the unit from your computer.

Specifications

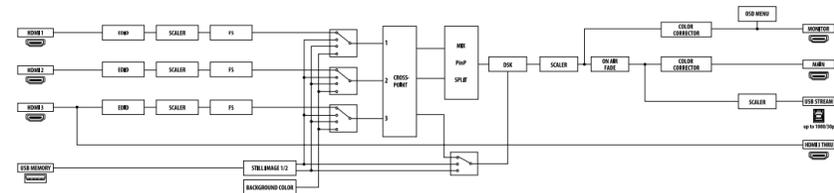
VIDEO	
Processing	4:4:4 (Y/Pb/Pr), 10-bit
Input Connectors	VIDEO INPUT 1-3 connectors: HDMI type A x 3 * HDCP Supported. * Multi-format Supported
Output Connectors	MAIN connector: HDMI type A * HDCP Supported MONITOR connector: HDMI type A * HDCP Supported THRU connector: HDMI type A * HDCP Supported USB STREAM port: USB B type
Input formats	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, VGA (640 x 480/60 Hz), SVGA (800 x 600/60 Hz), XGA (1024 x 768/60 Hz), HD (1280 x 720/60 Hz), WXGA (1280 x 800/60 Hz), SXGA (1280 x 1024/60 Hz), FWXGA (1366 x 768/60 Hz), SXGA+ (1400 x 1050/60 Hz), UXGA (1600 x 1200/60 Hz), FHD (1920 x 1080/60 Hz), WUXGA (1920 x 1200/60 Hz) * The refresh rate is the maximum value of each resolution. * Conforms to VESA DMT Version 1.0 Revision 11. * 1920 x 1200, 60 Hz: Reduced blanking * The video signal frame rate can be selected at the SYSTEM menu (59.94 Hz or 50 Hz).
Output formats	MAIN, MONITOR connectors: 720/59.94p, 720/50p, 1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p, XGA (1024 x 768/60 Hz) (*1), WXGA (1280 x 800/60 Hz) (*1), SXGA (1280 x 1024/60 Hz) (*1), FWXGA (1366 x 768/60 Hz) (*1), SXGA+ (1400 x 1050/60 Hz) (*1), UXGA (1600 x 1200/60 Hz) (*1), FHD (1920 x 1080/60 Hz), WUXGA (1920 x 1200/60 Hz) * The video signal frame rate can be selected at the SYSTEM menu (59.94 or 50). (*1) Output refresh rate is 75 Hz when frame rate is set to 50 Hz.
Still Image	Maximum Size: 1920 x 1200 pixels Format: Windows Bitmap File (.bmp) 24 bit per pixel, uncompressed * It can be loaded up to 2 files from USB memory at startup.
Video Effects	Scene: PiP, Split Transition: Black fade, Mix fade Key Composition: Luminance key Other: Still Image playback, Output fade (Audio, Video: WHITE or BLACK), Test pattern output

AUDIO	
Audio Processing	Sample rate: 48 kHz, 24 bits
Audio formats	VIDEO INPUT 1-3 connectors: Linear PCM, 48 kHz, 24 bits, stereo USB STREAM port: Linear PCM, 48 kHz, 16 bits, stereo
Input Connectors	VIDEO INPUT 1-3 connectors: HDMI type A MIC IN 1-2 jacks: Combo type (XLR, 1/4-inch TRS phone), phantom power (DC 48 V, 10 mA Max) LINE IN jacks: RCA phono type USB STREAM port: USB B type
Output Connectors	MAIN connector: HDMI type A MONITOR connector: HDMI type A LINE OUT jacks: RCA phono type USB STREAM port: USB B type PHONES jack: Stereo miniature phone type
Nominal Input Level	MIC IN 1-2 jacks: -60 to +4 dBu (Maximum input level: +28 dBu) LINE IN jacks: -10 dBu (Maximum input level: +8 dBu)
Input Impedance	MIC IN 1-2 jacks: Minimum 10 k ohms (balanced, HEAD AMP GAIN: 0 to +17 dBu), Minimum 5 k ohms (balanced, HEAD AMP GAIN: +17 to +64 dBu) LINE IN jacks: 15 k ohms
Nominal Output Level	LINE OUT jacks: -10 dBu (Maximum input level: +8 dBu) PHONES jack: 92 mW + 92 mW (32 ohms)
Output Impedance	LINE OUT jacks: 1 k ohms PHONES jack: 10 ohms
Audio Effects	Auto mixing, Echo canceller, Howling canceller, EQ, Delay, Compressor, HPF, Gate, Reverb, Limiter, Voice changer
Audio Player	Number of Players: 4 Data Format: WAV (Linear PCM, 48 kHz, 16 bits stereo/44.1 kHz, 16 bits, stereo)
COMMON SECTION	
Connectors	USB MEMORY port (HOST): USB A type (For USB flash drive, Still image, Audio player) USB STREAM port (DEVICE): USB B type (For USB-VIDEO (USB 3.0), USB-AUDIO stereo (USB 2.0); 1 IN/1 OUT, Remote control) DC IN jack
Functions	Scene memory : 5, Panel lock function, EDID emulator, Auto switching (Auto scan, Beat sync switching, Video follow audio)
Power Supply	AC Adaptor
Current Draw	2 A
Power Consumption	24 W
Operating Temp.	+0 to +40 degrees Celsius, +32 to +104 degrees Fahrenheit
Dimensions	314 (W) x 169 (D) x 66 (H) mm, 12-3/8 (W) x 6-11/16 (D) x 2-5/8 (H) inches
Weight	1.6 kg, 3 lbs 9 oz
Accessories	Startup Guide, Leaflet "USING THE UNIT SAFELY", AC adaptor, Power cord

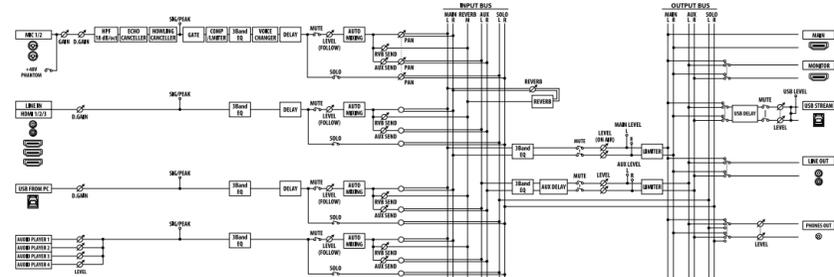
0 dBu=0.775 Vrms

Block Diagram

● VIDEO



● AUDIO



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VR-1HD

AV STREAMING MIXER



VR-1HD MAKES IT EASIER THAN EVER TO BROADCAST LIVE



MAIN FEATURES

- Three HDMI inputs that accept HD and computer video resolutions
- Two-studio quality XLR microphone inputs and line input
- Mic input for a goose neck microphone making it easy for hands-free and headset-free performances
- Scene switching functionality, with five pre-set scenes that can be included in any live stream
- Audio Effects functionality allows sound effects, jingles and theme songs in videos/performances
- Auto Switching modes make it easy to put on a one-person show
- Functions as its own audio engineer with automatic mixing functions and built in “equalizers”, “gates” and “compressors” to balance out changes in volume when speaking or singing to ensure professional sound performance
- Voice Changer effect from Roland’s VT series of Voice Transformers can instantly transform any performer’s sound
- Stream performances and presentations easily through a computer’s USB 3.0 ports



N.B. GOOSENECK MIC NOT INCLUDED

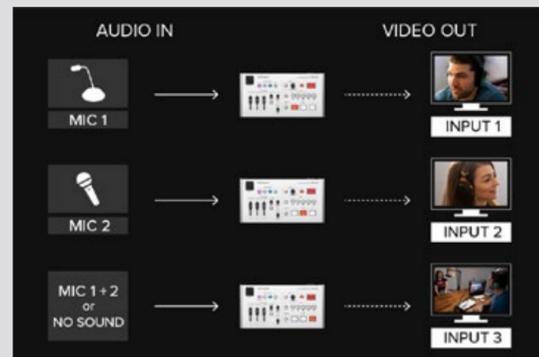
PRODUCE LIVESTREAM PERFORMANCES AT THE TOUCH OF A BUTTON

VIDEO

When you’re presenting a livestreamed vlog or nailing a live music performance, you’d normally need another person to help switch cameras. The VR-1HD lets you go it alone with three Auto Switching modes that take the strain once the broadcast begins;

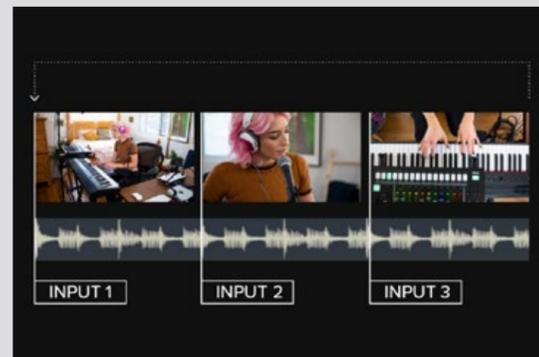
1. VIDEO FOLLOWS AUDIO NEW

The VR-1HD switches cameras based on who’s speaking into their microphone. If both people talk at once, or if no one is speaking, the VR-1HD can switch to a wide shot showing both presenters.



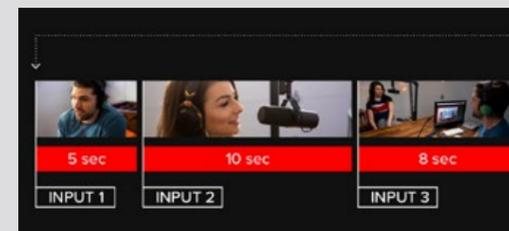
2. BEAT SYNC SWITCHING NEW

Start playing music and the VR-1HD will switch to different camera inputs based on your playing tempo or the music in your DJ performance – letting you act as your own VJ.



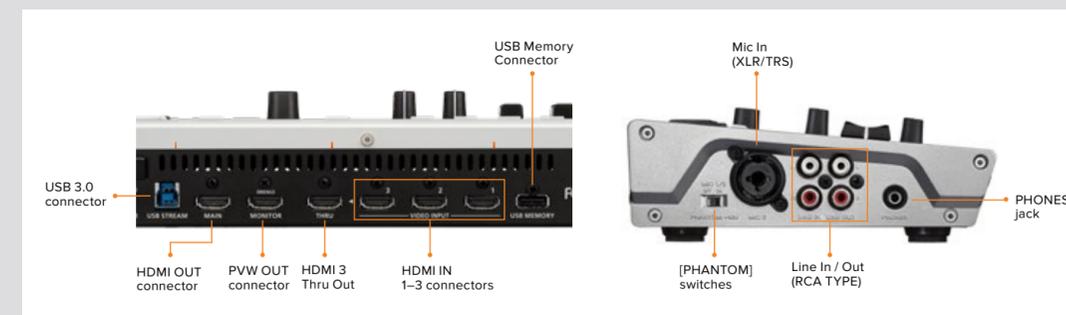
3. AUTO SCAN NEW

For extended live streams with no operator, set the VR-1HD to switch between sources in a pre-defined order, or randomly, at your chosen rate of time.



CONNECT TO YOUR COMPUTER

The VR-1HD uses the same connection technology as webcams, so just hook up to your computer via USB 3.0 and fire up the live casting or recording software. Then jump straight into a professionally produced, Full HD broadcast on your favorite platform, including Twitch, YouTube or Facebook Live.



AUDIO

Put audio on auto-pilot and relax, thanks to the VR-1HD’s Auto Mixing function. Just like having a sound engineer, you can ensure that different audio inputs aren’t competing, while also checking that the sound remains balanced. You can even set certain inputs to take priority so when the host starts to speak, the other audio levels are automatically reduced. Audio from your input sources can automatically change when you switch video sources, by engaging the Audio Follows Video function – one less thing to worry about during your livestream.



BROADCAST TOOLS FOR A GREAT-SOUNDING SHOW

Nobody talks about good sound when watching a live stream but they sure notice when it’s bad. Pros use sound Equalizers, Gates and Compressors. These are all in the VR-1HD to make sure everyone sounds their best on air along with reverb if someone is inspired to sing and needs a little ambience.

RADICALLY TRANSFORM YOUR VOICE

Roland makes the legendary VT series of Voice Transformers, to radically change their voice in real-time. This technology means that a male can sound like a female, a female can sound like a male, and anyone can sound like a robot, a monster or an alien. The VR-1HD’s Voice Changer effect can be applied to the mic inputs, and each input even has its own Voice Changer settings, so people can sound like someone else — or something else — entirely.



SOUNDS AND STINGERS ON-DEMAND

The VR-1HD lets you add your own custom sound effects via USB memory, including jingles or even a theme song, and trigger them instantly via the four Audio Effects buttons on the VR-1HD’s top panel.

