

# VR-1HD

## AV STREAMING MIXER

**MICROPHONE INPUT 1**  
There are two Microphone inputs with Phantom Power available. One on the top and one on left side.

**AUDIO EFFECTS**  
Choose from Voice Changer, Reverb or Audio file playback and Solo/Mute functions for these 4 programable buttons.

**AUDIO MIXER**  
Adjust the volume of the Inputs (MIC 1, MIC 2, and LINE) and Outputs (USB, PHONES, MAIN)

**SETUP MENU**  
The on-screen menu appears on the Monitor HDMI output. The Value knob has a push function for Enter.

**KEY BUTTON**  
Turns key compositing on/off.

**ON AIR BUTTON**  
The ON AIR button activates the USB streaming output on/off.

**SCENE SELECTION**  
Choose from 5 different picture compositions. All setups are fully adjustable and you can choose between PinP and Split screen modes. There is a convenient shortcut button to the Scene Edit menu.

**AUTO SWITCH**  
The Auto switch function can be set to Video follow Audio, where audio from the Mic/Line inputs can control the video channel selection.

**MONITOR & MENU OUTPUT**  
**THRU CONNECTOR**  
The "THRU" output throughputs the video from input 3. This can be used as a presenters output monitor or for recording purposes.

**USB MEMORY PORT**  
Connect a USB flash drive here. You can load Wave files (sound efx or music) or still images as well as backup/recall your settings.

**USB STREAM PORT**  
The USB 3.0 Streaming output transmits the main output as an uncompressed Video and Audio signal in various resolutions from 854 x 480p/25 up to 1080p/30. The USB port also accepts Audio return signal from the connected computer.

**MAIN OUTPUT**  
The Main is scalable and supports HDCP.

**VIDEO INPUTS**  
The 3 HDMI inputs has individual scalers that accepts a wide range of different resolutions and frame-rates. The inputs supports HDCP.

**MICROPHONE INPUT 2**  
There are two Microphone inputs with Phantom Power available. One on the top and one on left side.

**LINE IN/OUT**  
Connect audio inputs and outputs here.

**PHONES OUTPUT**  
Connect headphones here.

### VR-1HD Makes It Easier than Ever to Broadcast Live

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

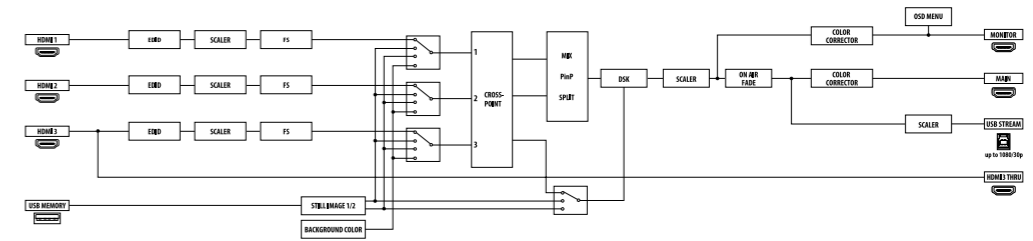
Audio Effects functionality allows sound effects, jingles and theme songs in videos/performances

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

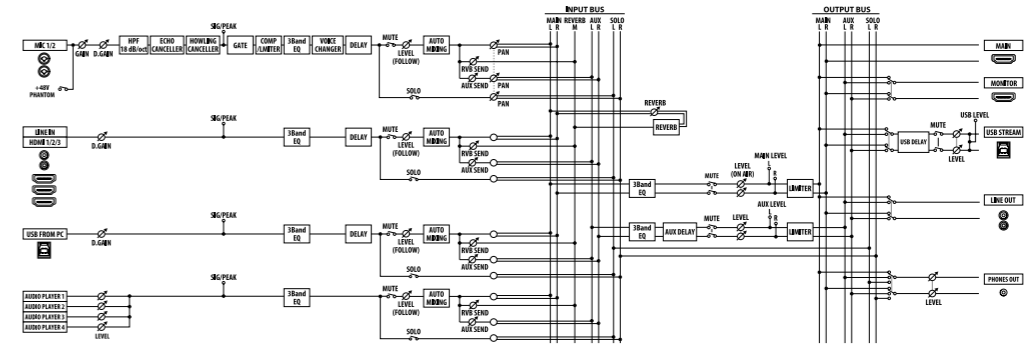


### BLOCK DIAGRAM

#### VIDEO



#### AUDIO



### 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.

### SPECIFICATIONS VR-1HD

| VIDEO             |   |
|-------------------|---|
| Processing        | 4:4:4 (Y/Pb/Pr), 10-bit   |
| Input Connectors  | VIDEO INPUT 1--3 connectors: HDMI type A x 3<br>* HDCP Supported.<br>* Multi-format Supported   |
| Output Connectors | MAIN connector: HDMI type A * HDCP Supported<br>MONITOR connector: HDMI type A * HDCP Supported<br>THRU connector: HDMI type A * HDCP Supported<br>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)<br>* The refresh rate is the maximum value of each resolution.<br>* Conforms to VESA DMT Version 1.0 Revision 11.<br>* 1920 x 1200, 60 Hz: Reduced blanking<br>* The video signal frame rate can be selected at the SYSTEM menu (59.94 Hz or 50 Hz) |
| Output formats    | MAIN, MONITOR connectors:<br>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)<br>* The video signal frame rate can be selected at the SYSYSTEM menu (59.94 or 50).<br>(*1) Output refresh rate is 75 Hz when frame rate is set to 50 Hz.   |
| Still Image       | USB STREAM port:<br>854 x 480/29.97p, 854 x 480/25p, 854 x 480/59.94p, 854 x 480/50p, 720/29.97p, 720/25p, 720/59.94p, 720/50p, 1080/29.97p, 1080/25p<br>* The video signal frame rate can be selected at the SYSTEM menu (59.94 Hz or 50 Hz).<br>Maximum Size: 1920 x 1200 pixels<br>Format: Windows Bitmap File (.bmp) 24 bit per pixel, uncompressed<br>* It can be loaded up to 2 files from USB memory at startup.   |
| Video Effects     | Scene: PinP, Split<br>Transition: Black fade, Mix fade<br>Key Composition: Luminance key<br>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<br>USB STREAM port: Linear PCM, 48 kHz, 16 bits, stereo  |
| Input Connectors     | VIDEO INPUT 1--3 connectors: HDMI type A<br>MIC IN 1--2 jacks: Combo type (XLR, 1/4-inch TRS phone), phantom power (DC 48 V, 10 mA Max)<br>LINE IN jacks: RCA phono type<br>USB STREAM port: USB B type |
| Output Connectors    | MAIN connector: HDMI type A<br>MONITOR connector: HDMI type A<br>LINE OUT jacks: RCA phono type<br>USB STREAM port: USB B type<br>PHONES jack: Stereo miniature phone type                              |
| Nominal Input Level  | MIC IN 1--2 jacks: -60--+4 dBu (Maximum input level: +28 dBu)<br>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--+17 dBu, Minimum 5 k ohms (balanced, HEAD AMP GAIN: +17--+64 dBu) LINE IN jacks: 15 k ohms   |
| Nominal Output Level | LINE OUT jacks: -10 dBu (Maximum input level: +8 dBu)<br>PHONES jack: 92 mW + 92 mW (32 ohms)   |
| Output Impedance     | LINE OUT jacks: 1 k ohms<br>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)<br>USB STREAM port (DEVICE): USB B type (For USB-VIDEO (USB 3.0), USB-AUDIO stereo (USB 2.0): 1IN/1 OUT, Remote control)<br>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