PROFESSIONAL VIDEO EQUIPMENT
2023-2024 CATALOGUE
Welcome

Roland offers an array of professional video solutions for multiple applications, combining superb product quality with award-winning design. As the product of choice for video professionals on a global scale, the video range is feature-rich, innovative and built on the ground-breaking digital technology that has made Roland a market leader.

Roland first entered the world of professional video in 1998 with the V-5 Video Canvas, which delivered unprecedented quality and functionality at an accessible price. In 2018, we celebrated our twentieth anniversary in video, and today have a varied and ever-growing product portfolio.

As the world of professional video evolves, we are inspired to develop products with increasingly sophisticated features, that can deal with ever-changing hardware and software, handle those last-minute changes and still deliver a seamless result. That’s why Roland’s professional video products are designed through consultation with the market and – most importantly – the end user, so that every requirement is met. The result is a comprehensive portfolio of compact, integrated products that provide the flexibility and connectivity demanded by video professionals.

From portable, full-HD studio gear that can mix, edit, record and distribute audio/video, to full-HD matrix switchers that connect and switch multiple sources, Roland video equipment has the features you need to achieve professional results. In addition to these all-important features, we’ve enhanced the user experience by incorporating intuitive user interfaces, touchscreen displays, preview monitors and clear workflows into the product design.

As Roland Corporation celebrated its 50th year in 2022, we take pride in holding our place at the cutting edge of video technology. The audiovisual world is constantly evolving, more so in recent years, and we have responded with award-winning multi-camera livestreaming and hybrid event solutions. The Roland philosophy to ‘inspire enjoyment through creativity’ has never been stronger.

Whether you’re working in corporate, broadcast, live production, livestreaming, visual performance or house of worship, Roland professional video gear has all the features you are looking for – and more. And if your requirement is for video switchers, streaming switchers, matrix switchers, converters or equipment for recording and playback, our products are reliable, powerful and affordable.

For further information, visit the Roland Professional Video website for video tutorials, application guides, product brochures and case studies.

PROAV.ROLAND.COM
<table>
<thead>
<tr>
<th>Category</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIDEO SWITCHERS</td>
<td></td>
</tr>
<tr>
<td>AV MIXERS AND STREAMING DEVICES</td>
<td>UVC-01</td>
</tr>
<tr>
<td>MATRIX SWITCHERS</td>
<td>UVC-02</td>
</tr>
<tr>
<td>VIDEO PROCESSOR</td>
<td></td>
</tr>
<tr>
<td>VIDEO INSTANT REPLAY</td>
<td></td>
</tr>
<tr>
<td>CONVERTERS</td>
<td></td>
</tr>
<tr>
<td>ACCESSORIES</td>
<td></td>
</tr>
</tbody>
</table>
Contents

V-02HD MK II  V-1HD  V-1HD+  V-1HDMKII  V-8HD  V-1SDI

AeroCaster  SR-20HD  VR-1HD  VR-6HD  VR-120HD  VR-400UHD

XS-1HD  XS-42H  XS-62S

VP-42H  P-20HD

VC-1 HS  VC-1 SH  VC-1 DL  VC-1 SC  VC-1 DMX  VC-100UHD

HDMI Cables  SDI Cables  CB-BV1
Upgrade your events to 4K HDR — one input at a time

- 4K without compromise
- High Dynamic Range [HDR]
- Full 50/60Hz frame rate
- A more vivid color space
- 10-bit 4:4:4 pixel-accurate color
- 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
- Audio system integration
- The best solution for working with LED displays
- Automatic ROI
- PTZ Control
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.

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.

A more vivid color space
The V-600UHD supports Rec.2020, the highest-specification Wide Color Gamut (WCG), as well as RGB and Rec.709 standards to display the widest range of visible colors. This provides an increased level of realism and improved color accuracy, especially for red and yellow color ranges.

10-bit 4:4:4 pixel-accurate color
Internal 10-bit Color Depth processing reduces color 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.
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, Avonics, and VISCA compatible professional pan-tilt-zoom (PTZ) robotic cameras to streamline workflow without needing a dedicated controller.
V-600UHD

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 its 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.
V-60HD

HD VIDEO SWITCHER

Plug-and-play production switcher with audio for live events and streaming

- 4 SDI inputs (with de-interlacer)
- 2 HDMI inputs (scaled)
- 1 RGB shared with HDMI input 6 (scaled)
- 2 SDI outputs – assignable to PGM, PVW, AUX
- 2 HDMI outputs – assignable to PGM, PVW, AUX
- 1 multiview output – program, preview, plus 8 video sources with audio meters
- LAN – remote control and Smart Tally
- RS-232 – remote control
- USB Port – still image upload, saving program files
Plug-and-play production switcher with audio for live events and streaming

Church/theater

The V-60HD is ideal for multiscreen environments usually found in churches, conference centers, hotels, and trade show facilities where different content needs to be switched to independent screens. The dedicated Aux buttons make switching to a second destination as easy as switching to the main screen. The wireless tally system for iOS and Android devices makes for smoother events by providing tally that helps talent and camera operators identify which camera is currently selected for program and which camera will be switched to next. Auto-Scan (Ver.2.0), integrated audio inputs and advanced effects including Auto-Mixing and powerful dynamics make the V-60HD an ideal streaming mixer solution to remix stems from an audio console and adjust for broadcast.

Live production

Corporate event production is the fastest growing live event space with companies hosting meetings, trainings, new product announcements, both in person and streaming. The V-60HD is portable and small enough to be used in multiple locations in an office or outside. The four SDI inputs and two HDMI inputs are perfect for switching cameras and computers at the same time for dynamic presentations. Not all cameras support full 1080p so the de-interlacer on the SDI inputs allows you to mix and match 1080i and 1080p SDI video sources without external converters. Audio is easier to mix than ever before using the V-60HD’s auto mixing function.

Education

Video communication helps improve the effectiveness of education when used for streaming lectures, assemblies, distance learning, sports, live performances or theater productions. Multi destination outputs include Program, Preview and AUX buses and make it easy to send the main output to the primary screen or live stream and presenter notes to a presenter’s monitor. Audio auto-mixing automatically adjusts audio level based on weighting ensuring even levels for the room mix, presenter to send to recording, live stream or in-room speakers. Educators can use the multi-channel audio embed function to record 8 discreet audio channels to an SDI video recorder to fix audio issues in later editing or separate multi-language audio sources post event.

Roland’s unique and proprietary wireless tally system called Smart Tally uses a wireless LAN router connected to the V-60HD to send tally information to iOS or Android devices on the network.

Church/theater

The V-60HD is ideal for multiscreen environments usually found in churches, conference centers, hotels, and trade show facilities where different content needs to be switched to independent screens. The dedicated Aux buttons make switching to a second destination as easy as switching to the main screen. The wireless tally system for iOS and Android devices makes for smoother events by providing tally that helps talent and camera operators identify which camera is currently selected for program and which camera will be switched to next. Auto-Scan (Ver.2.0), integrated audio inputs and advanced effects including Auto-Mixing and powerful dynamics make the V-60HD an ideal streaming mixer solution to remix stems from an audio console and adjust for broadcast.
**Professional user interface**

Professional broadcast cross point buttons with PGM/PST LED color indicators. Rugged T-Bar, DSK quick edit knobs for key level and gain. Two dedicated PinP and Split buttons with knobs for center framing of Split and PinP placement. Change transition type using either mix or two preset wipe buttons with dedicated transition dissolve time knob. Front panel 3-inch LCD display with quick access menu navigation to adjust switcher parameters.

**Multi-view output**

V-60HD can preview all six video inputs and two still images, PGM and PVW to a single preview monitor via the Multi-view output. In addition, you can display the menu on the Multi-view display, so you make setting changes without changing your focus from the preview display. From Ver.2.0, exchanging PGM and PVW window and editing label name of IN1 to 6 are possible.
AUX bus
Live streams, HD recording, and confidence monitors often have different visual needs from the main program output. Switch any of the connected input sources to any of the four SDI or HDMI outputs without affecting the main PGM destination. AUX Linked PGM enables AUX output to synchronize with the Program (PGM) output.

SPECIFICATIONS V-60HD

<table>
<thead>
<tr>
<th>VIDEO</th>
<th>Processing</th>
<th>HDMI IN 1–5, 8-bit</th>
<th>HDMI IN 6, 10-bit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Connectors</td>
<td></td>
<td>HDMI IN 5–6 type x 2</td>
<td>HDMI IN 6 type x 1</td>
</tr>
<tr>
<td>Output Connectors</td>
<td></td>
<td>HDMI OUT 1–2 type x 2</td>
<td>HDMI OUT 1–2 type x 1</td>
</tr>
<tr>
<td>Input Formats</td>
<td></td>
<td>HDMI IN 1–4: SDI/480i/576i, 1080i/50p, 1080p/59.94p, 1080p/60p, 2K/24p/50p/60p, 4K/24p/50p/60p, 4K/50p/60p</td>
<td>HDMI OUT 1–2: SDI type x 2</td>
</tr>
<tr>
<td>Output Formats</td>
<td></td>
<td>HDMI OUT 1–2: HDMI type A x 2</td>
<td>HDMI OUT 1–2: HDMI type A x 2</td>
</tr>
</tbody>
</table>

Audio Processing
- Sampling rate: 24 bits, 48 kHz
- Stereo inputs
- Two mono outputs
- Supports AES/EBU, ADAT, and ADI interface
- 24-bit / 96 kHz input
- 24-bit / 32-bit output

Audio Formats
- SDI IN: Linear PCM, 24 bits, 48 kHz
- SDI OUT: Linear PCM, 24 bits, 48 kHz
- HDMI IN: Linear PCM, 24 bits, 48 kHz
- HDMI OUT: Linear PCM, 24 bits, 48 kHz

Input Connectors
- Analog: AUDIO IN 1–6 type x 2
- HDMI IN 1–6: HDMI type A x 2

Output Connectors
- Analog: AUDIO OUT 1–12 type x 2
- HDMI OUT 1–2: HDMI type A x 2

Input Linkage
- AUX bus
- A single AUX bus allows linking any AUX input to any output, providing maximum flexibility.

Audio Effects
- Auto Mixing, EQ, Delay, Compressor, HPF, Gate, Multi-Band Compressor, Limiter

Discreet Multi-channel Audio Embedding
Assign up to eight analog audio inputs to a separate audio embed channel on SDI 1 and 2 outputs to ensure a separate mix pre-effect (dry) or post effect (wet) for correcting audio problems post live event. This feature is additionally useful for multi-language events to record the voice-over or language translation on its own audio channel to a separate master.

OTHERS
- USB: USB A type (for USB memory)
- Other Connectors: TALLY/GPI, DB-25 type (female), 9-pin (male)
- LAN: RJ45, 100BASE-TX for Remote Control
- LAN: RJ45, 10/100BASE-TX for Remote Control
- Other Functions: MEMORY (8 types), Panel lock function, EDID Emulator, EDID Editor
- Display: Graphic LCD, 128 x 64 dots
- Power Source: AC Adapter
- Current Draw: 3.1 A
- Power Consumption: 37.0 W
- Operating Temp: +0 to +40 degrees Celsius, -10 to +104 degrees Fahrenheit
- Dimensions: 355 (W) x 221 (D) x 96 (H) mm, 14-1/16 (W) x 8-3/4 (D) x 3-13/16 (H) inches
- Weight: 3.0 kg, 6 lbs 10 oz
- Accessories: Owner’s Manual, AC adapter, Power cord

Other Connectors
- TALLY/GPI: DB-25 type (female), 9-pin (male)
- LAN: RJ45, 10BASE-T, 10/100BASE-TX for Remote Control
- Other Functions: MEMORY (8 types), Panel lock function, EDID Emulator, EDID Editor
- Display: Graphic LCD, 128 x 64 dots
- Power Source: AC Adapter
- Current Draw: 3.1 A
- Power Consumption: 37.0 W
- Operating Temp: +0 to +40 degrees Celsius, -10 to +104 degrees Fahrenheit
- Dimensions: 355 (W) x 221 (D) x 96 (H) mm, 14-1/16 (W) x 8-3/4 (D) x 3-13/16 (H) inches
- Weight: 3.0 kg, 6 lbs 10 oz
- Accessories: Owner’s Manual, AC adapter, Power cord
V-1HD HD VIDEO SWITCHER

- 4 HDMI inputs
- Easy-to-use interface
- Easy to operate with hardware controls
- Picture-in-picture and split functions
- Remote control via USB or MIDI connection
- Supports up to Full HD 1080p

- Full 12-channel audio mixer included
- Two HDMI outputs
- Two EFFECTS knobs deliver genuine visual performance
- Software control using V-1HD RCS application for Mac, PC, and iPad

Compact and portable entry model of full HD supported video switcher
**VIDEO BLOCK DIAGRAM**

**VIDEO**

**Processing**
- 4:2:2 (Y/Pb/Pr), 8-bit

**Input Connectors**
- HDMI INPUT 1–4: Type A (19 pins) x 4 * HDCP Supported

**Output Connectors**
- HDMI OUTPUT: Type A (19 pins) * HDCP Supported

**Input formats**
- HDMI: 720/59.94p, 720/50p (FORMAT switch=720p), 1080/59.94p, 1080/50p, 1080/59.94p, 1080/50p (FORMAT switch=1080p or 1080p)
- The input interlaced video signal is converted to progressive video signal by internal processing.

**OUTPUT formats**
- The video signal frame rate is selected by SETUP parameters (59.94 or 50)

**Effects**
- Transition: CUT, MIX (DISSOLVE/FAM/NAM/MOSAIC), WIPE (30 types), TRANSFORMER (11 types)
- Filter and Compositing: NEGATIVE, EMBASS, COLORIZE, COLORPASS, POSTERIZE, SILHOUETTE, MONOCOLOR, FINDEdge, FLIP, LUMIKEY, BL-LUMIKEY, G8-LUMIKEY, BCLR-LUMIKEY, PinP (1/4), PinP (1/2), SPLIT (H-STRETCH), SPLIT (H-CENTER), SPLIT (V-STRETCH), SPLIT (V-CENTER)
- *@ marked Effects are effected common to A-BUS and B-BUS

**AUDIO BLOCK DIAGRAM**

**AUDIO**

**Audio Processing**
- Sampling rate: 24 bits/48 kHz

**Input Connectors**
- Digital: SDI INPUT 1–3 (BNC) x 3 SMPTE 299M, HDMI INPUT 3–4 (HDMI Type A 19 pins) x 2, Analog: AUDIO IN (RCA phono type), MIC (Stereo mini type, plug-in power supported)

**Output Connectors**
- Digital: HDMI OUTPUT (HDMI Type A 19 pins), HDMI PREVIEW (HDMI Type A 19 pins), Analog: AUDIO OUT (RCA pin type), PHONES (Stereo mini type)

**Input Impedance**
- AUDIO IN: 15 k ohms, MIC: 10 k ohms

**Output Impedance**
- AUDIO OUT: -10 dBu (Maximum: +8 dBu), PHONES: 72 mW + 72 mW (32 ohms)

**Other Functions**
- MEMORY (8 types), FREEZE (input video captured), BPM SYNC (audio transition synchronized to tempo), OUTPUT FADE (WHITE/BLACK)

**OTHER JACKS**
- USB B Type (for remote control from PC)

**OTHERS**
- Other Functions: MEMORY (8 types), FREEZE (input video captured), BPM SYNC (audio transition synchronized to tempo), OUTPUT FADE (WHITE/BLACK)

**Power Supply**
- AC Adaptor

**Current Draw**
- 1.5 A

**Power Consumption**
- 18 W

**Operating Temp.**
- +0 to +40 degrees Celsius, +32 to +104 degrees Fahrenheit

**Dimensions**
- 313 (W) x 102 (D) x 59 (H) mm, 12-1/3 (W) x 4 (D) x 2-1/3 (H) inches

**Weight**
- 1.2 kg (excluding AC adaptor), 2 lbs 10-2/5 oz

**Accessories**
- Owner’s Manual, AC Adaptor, Power Cord, Card Hook
Switch, mix, and create like a pro

- Professional HD switching solution for live events, livestreaming, or both at once
- Compact and portable for fast set up
- Technology-assisted automatic video switching
- Pro audio I/O with legendary Roland sound quality
- Eight memory presets to recall visual layouts on cue

- Standalone video switcher and 14-channel audio mixer for single operators
- Familiar interface that’s quick to learn and easy to use
- Four-layer effects and keying engine to engage audiences with graphics, lower thirds, and social callouts
- Free iPad remote control app available
The V-1HD+ is the ultimate compact A/V switching solution for serious visual storytellers. Elevate your creative production process with versatile I/O, a familiar user interface, deep control, and essential monitoring tools that help keep your content looking great and sounding perfect.

V-1HD+ iPad remote control utility

The dedicated V-1HD+ remote control app turns an iPad into an efficient touch interface for the V-1HD+. Run essential switching functions, mix audio with virtual faders, change settings and effect parameters quickly, and create up to 8 custom scenes for fast, efficient setup changes.

14-channel audio mixing with effects

With two XLR mic inputs and selectable phantom power, the V-1HD+ lets you bring pro-grade microphones into your productions, including condenser broadcast mics. There’s also an 1/8-inch input for a lavaliere mic or stereo audio source like a smartphone, plus another stereo input on RCA jacks. Embedded stereo audio from the four HDMI inputs can be included in your mix as well. With the V-1HD+, there’s no need for a dedicated small audio console. Distribute analog sound to a PA system via two balanced ¼-inch TRS outputs, and use embedded digital audio in the HDMI outputs to feed recorders and livestream broadcasts.

A legacy of success

Since its release in 2015, the Roland V-1HD has been the most popular high-definition, four-channel HDMI video switcher available. The V-1HD+ extends this legacy with a deeper feature set for advanced applications—while still maintaining the simple operation, pro performance, and rugged reliability that’s made the V-1HD a favorite of users around the world.

No-compromise video I/O

Four HDMI inputs with frame rate conversion let you mix a variety of sources, including cameras, presentation computers, tablets, and video game consoles. And when you have a troublesome source that won’t display correctly, simply plug it into Input 4 and let the built-in video scaler sync and calibrate the image automatically.

Two independent HDMI outputs can be assigned to display one of three different video busses, providing the versatility you need for pro production. For example, you can use one as your main program output for a recorder or livestream, and the second output to turn any HD video monitor into an "up-next" input preview display or expanded multiviewer with 10 windows.

Multiviewer display

A 10-window multiviewer display can be applied to one or both HDMI outputs, helping you manage productions in real time. Cue up camera shots, preview presentations, and choose stored still images before taking them live to the program feed. Camcorder recording status can be monitored as well.
Say goodbye to workflow workarounds

While many video switchers promise easy workflows, they often require workarounds for optimum results. Too often, those workarounds force you into technical compromises and purchasing extra gear. With its feature-rich design, the V-1HD+ provides the key tools you need to get the job done right.

Audio monitoring

Even if your video looks perfect, poor sound will ruin the entire production. With the V-1HD+, you can always keep track of your audio quality. Each analog input has its own signal/peak indicator, and headphones can be plugged in to monitor the overall audio feed. When using the multiviewer display, signal level meters are shown for all inputs and the main outputs.

Pro operation made easy

Your passion for a simplified interface led our designers to add quick-action buttons for the most commonly used operations. With one-touch access to the system menu, downstream key on/off, transition type, picture-in-picture, effects on/off, and more, V-1HD+ production workflow is smooth and hassle-free.

Four-layer effects engine

Savvy visual storytellers understand the power of layered graphics and visual effects. With four composition layers at your command, it's simple to add lower-third titles, logos, social media comments, and more to inform your audience and keep them involved.

Legacy Support

Budgets don't always allow you to upgrade every component in your video system at the same time. The V-1HD+ can interface with legacy systems and components via its RS-232 port, allowing you to keep working while saving up for that new piece of gear.
**Video**

- **Video Processing**: 4:2:2 (Y/Pb/Pr), 8-bit
  - **Input Connectors**: INPUT 1-3; HDMI type A x 3  
    - *HDCP Supported*
  - **Output Connectors**: OUTPUT 1-2, HDMI type A *HDCP Supported*
  - **Input formats**: 720/59.94p, 720/59.94i, 720/60i
  - **Output formats**: 1080/59.94p, 1080/59.94i, 1080/60i
  - **Video Effects**: Transition: CUT, MIX (DISOLVE/FAM/NAM), Wipe (8 types)

- **Audio**
  - **Audio Processing**: Sample rate: 24 bits/48 kHz
  - **Audio Connectors**: Input Connectors 1-4: HDMI Type A  
    - *3 Band PEQ*
    - *3 Band EQ*
  - **Output Connectors**: OUTPUT 1-3: HDMI Type A  
    - *HDCP Supported*
  - **Input formats**: AUDIO IN 1-2: -60 to +4 dBu
  - **Output formats**: AUDIO OUT 1-2: 1/4-inch TRS phone type

- **Specifications**
  - **HDMI 1 / 2 / 3 / 4**
  - **Audio Effects**: MUTE, SOLO, LEVEL, REVERB
  - **Audio Processing**: Linear PCM, 24 bits/48 kHz, 2 ch
  - **Audio Connectors**: Input Connectors 1-4: HDMI Type A
  - **Output Connectors**: OUTPUT 1-3: HDMI Type A

- **Options**
  - **USB MEMORY**: USB A type (for USB flash drive)
  - **REMOTE**: USB B type (for remote control)
  - **Expression Pedal**: EV-5, BOSS FV-500L, FV-500H

- **Power Supply**
  - **Current Draw**: 2.1 A
  - **Power Consumption**: 25.2 W

- **Dimensions**
  - **Weight**: 1.4 kg, 3 lbs 2 oz

- **Accessories**
  - **Startup Guide, Leaflet “USING THE UNIT SAFELY”, AC adaptor, Power cord**

---

**Video Block Diagram**

**Audio Block Diagram**

---

**Specifications**

**V-1HD+**

- **Input Connectors**: INPUT 1-4; HDMI Type A x 4  
  - *HDCP Supported*
- **Output Connectors**: OUTPUT 1-3: HDMI Type A  
  - *HDCP Supported*
- **Input formats**: AUDIO IN 1-2: -40 to +4 dBu
  - **Output formats**: AUDIO OUT 1-2: 1/4-inch TRS phone type

---

**Audio Processing**: Linear PCM, 24 bits/48 kHz, 2 ch

---

**Power Supply**: AC Adaptor

---

**Accessories**: Startup Guide, Leaflet “USING THE UNIT SAFELY”, AC adaptor, Power cord

---

**Options**: Footswitch: BOSS FS-5U, FS-6, FS-7

**Expression Pedal**: EV-5, BOSS FV-500L, FV-500H
V-1SDI

3G-SDI VIDEO SWITCHER

Professional SDI video switching that you can take anywhere

- Support for SDI and HDMI cameras, smartphones, tablet computers and PCs etc.
- Easy to operate with hardware controls
- Compact size
- Supports up to Full HD 1080p
- 3 x 3G-SDI and 2 x HDMI inputs
- 2 x 3G-SDI and 1 x HDMI output
- Input 4’s scaler now supports a wider range of video and VESA resolutions*1,2
- HDCP compliant
- Quad input multi-viewer with source labelling and audio metering
- Composition effects including DSK (Downstream Keyer), picture-in-picture etc.
- Capturing a still image from Input Video on channel 4*3 [Ver.1.5]
- Full 14-channel audio mixer included
- Software control using V-1SDI RCS application for Mac and PC and remote control via RS-232 connection
- Send a still image to the V-1SDI by V-1SDI RCS [Ver.1.5]
**VIDEO**

**Processing** 4:2:2 (Y/Pb/Pr), 8-bit

**Input Connectors**
- SDI INPUT 1-3: BNC x 3
  - * Conforms to SMPTE 296M, SMPTE 274M
  - * HDCP Supported
- HDMI INPUT 3-4: Type A (19 pins) x 1
  - * Conforms to SMPTE 242M (SMPTE 425M-AB), 292M
  - * HDCP Supported

**Output Connectors**
- SDI OUT PGM BNC x 1, SDI OUT PVW BNC x 1
  - * Conforms to SMPTE 242M (SMPTE 425M-AB), 292M, HDMI OUT
- HDMI OUT MULTI-VIEW: Type A (19 pins) x 1

**Input formats**
- SDI INPUT 1-3: Conforms to SMPTE 296M, SMPTE 274M
  - HDMI INPUT 3: 720/59.94p, 720/50p; SMPTE 296M FORMAT switch
  - 720p: 1080/59.94i, 1080/50i
  - 1080i: 1080/59.94p, 1080/50p; SMPTE 274M FORMAT switch: 1080i or 1080p
  - * The video signal frame rate can be selected at the SETUP menu (59.94 or 50)

**Output formats**
- SDI OUT PGM/OUT PVW: BNC x 3
  - Conforms to SMPTE 296M, SMPTE 274M FORMAT switch: 1080p
  - HDMI OUT: 1080i, 1080p
  - * HDCP Supported

**Audio Processing**
- Sampling rate: 24 bits/48 kHz
- Audio formats: Linear PCM, 24 bits/48 kHz, 2ch
- * Conforms to SMPTE 299M
  - HDMI: Linear PCM, 24 bits/48 kHz, 2ch

**Input Connectors**
- Digital: SDI INPUT 1-3 (BNC) x 3
  - * Conforms to SMPTE 296M, SMPTE 274M

**Output Connectors**
- HDMI OUT MULTI-VIEW: Type A (19 pins) x 1
  - * Conforms to SMPTE 296M

**Audio Effects**
- EQ, Delay, Compressor, HPF, Gate, Reverb, Mastering effect

**OTHERS**
- Other Connectors: USB B Type (for remote control from PC), RS-232: DB-9 type
- Other Functions: MEMORY (9 types), FREEZE (input video captured), OUTPUT FADE (Audio, Video: WHITE or BLACK)

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Current Draw</th>
<th>2.1 A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Supply</td>
<td>AC Adaptor</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>25 W</td>
</tr>
<tr>
<td>Operating Temp.</td>
<td>+0 to +40 degrees Celsius, +32 to +104 degrees Fahrenheit</td>
</tr>
<tr>
<td>Dimensions</td>
<td>315 (W) x 108 (D) x 59 (H) mm, 12-1/3 (W) x 4-1/4 (D) x 2-1/3 (H) inches</td>
</tr>
</tbody>
</table>

**Accessories**
- Owner’s manual, AC adapter, Power cord, Cord hook
Switcher, scaler, expander with audio processing and video effects

- 2 in / 2 out multi-format video mixer
- Professional transition and composition FX including KEY and PinP
- Input / output scalers and EDID emulator
- 10-bit 4:4:4 quality processing
- 14 onboard Visual FX including Mosaic FX
- Still image store

- Advanced audio processing DSP
- Audio embed/de-embed
- Switch between cameras via a connected footswitch (sold separately)
- Preset memory (8 types)
- Dedicated V-02HD remote control app for iPad
Simply simple

The V-02HD MK II is the world’s easiest two-camera livestreaming solution. With its intuitive layout, large controls, and T-bar fader, it’s incredibly simple to operate, even if you have no broadcasting experience. Go live in three quick steps: 1. Plug in up to two sources via HDMI, including cameras, computers, mobile devices, and gaming consoles. 2. Connect the USB-C output to your computer. 3. Launch your streaming software and select the V-02HD MK II as the camera source.

Stream with every platform

The V-02HD MK II connects to the streaming computer you already own and the audience you already have. It’s instantly recognized as a camera source when you plug in via USB, so it’s ready to go for Facebook, YouTube, Twitch, and Zoom. It also integrates seamlessly with OBS Studio, StreamYard, and Restream for more advanced workflows. High-quality streaming up to 1080p/60 FPS is supported, and it’s possible to send two additional feeds to external HDMI devices via the Program Out and Preview Out if needed.

Upgrade your sound too

The V-02HD MK II also includes a 10-channel digital audio mixer with Roland’s legendary sound quality. There are two audio inputs with 3.5 mm jacks, and each supports a microphone—including lavalier mics that require plug-in power—or stereo audio from a smartphone, mixer, or other device. Embedded stereo audio from your HDMI sources can be mixed in as well, including microphones connected to your cameras.

HDMI cameras for the win

From talk shows and live demonstrations to artistic performances and beyond, cameras that support HDMI output will elevate the image quality in your streams and drive more audience engagement. You can connect a variety of different camera types to the V-02HD MK II. GOOD—A smartphone or tablet with an HDMI adaptor offers a good option that’s compact and easy to set up anywhere. BETTER—A point-and-shoot camera, action camera, or video camcorder with features like zoom, deeper exposure and focus control will take things even further. BEST—A DSLR or mirrorless camera is the ultimate solution, offering the best image quality for a cinematic look, interchangeable lenses, and improved performance in low-light conditions.
Step Up Your Livestreams. Ditch the webcam and step up your livestreams with the Roland V-02HD MK II Streaming Video Mixer. Compact, affordable, and simple to use, this desktop device allows you to connect and switch two high-quality HDMI cameras and send them directly to your favorite streaming platform over USB-C. You can also mix in audio sources via dedicated inputs and HDMI, apply video effects and transitions, and more.

Go deeper with advanced Pro A/V features

Out of the box, the V-02HD MK II gives you the dedicated controls you need to switch cameras and adjust video and audio sources when you go live. But if you want to dive deeper, there's a world of advanced features and custom assignments to explore. Connecting an HDMI monitor to the Preview Out provides a display for adjusting a vast range of functions from the V-02HD MK II panel. And with our remote control apps for iPad, macOS, and Windows, you can operate the V-02HD MK II via an intuitive graphical interface.

More audio control

Access full mixing functions for all audio sources, add studio polish with compressor, EQ, and reverb, and have fun with formant shifting and robot sounds with the unique voice changer effect. It's also possible to independently delay the audio inputs and outputs—including the headphones output—if you have any synchronization issues with your cameras.

Visual effects and scenes

Adding video effects and creating scenes has become easier with software, but they put a big burden on your computer. The V-02HD MK II provides a dedicated hardware solution that lightens that load. Via the preview monitor and apps, you can set up picture-in-picture windows, create titles and lower thirds, composite scenes, and much more.

Footswitch assignment

If you’ve added footswitches to your system, you can set custom functions for them in the preview monitor and remote apps.

Wireless camera expansion with the AeroCaster switcher

The purchase of a V-02HD MK II provides free access to Roland’s AeroCaster Switcher for iPad, a powerful solution to cleanly expand your camera setup without the hassle of extra cables. With this unique app, you can wirelessly connect and switch up to five smartphone or tablet cameras, then output a combined program feed to the V-02HD MK II or another supported Roland switcher with HDMI input.

V-02HD MK II iPad remote app

The dedicated V-02HD MK II Remote app turns an iPad into an efficient touch interface for the V-02HD MK II. Run essential switching functions, mix audio with virtual faders, change settings and effect parameters quickly, and create up to eight custom scenes for seamless setup changes.
**Video Processing**

- **Input Connectors**
  - INPUT 1--2: HDMI type A x 2
  - * HDCP Supported
  - * Multi-format Supported
- **Output Connectors**
  - PROGRAM OUT: HDMI type A
  - PREVIEW OUT: HDMI type A
  - * HDCP Supported
  - * Multi-format Supported
- **Input formats**
  - 480i/59.94, 480p/59.94, 720p/59.94, 1080p/59.94, 1080i/59.94*
  - 1080i/60, 1080p/29.97, 720p/29.97
  - 1080i/50, 1080p/50, 720p/50, 1080p/50, 1080i/50, 1080p/25*
  - 1080/23.98p, 1080/24, 1080/25
  - 852/60i, 852/50i, 852/50p, 1080/50i, 1080/50p
  - 1080/60p
  - 1080/29.97p, 1080/30p

- **Output formats**
  - 480i/59.94, 480p/59.94, 720p/59.94, 1080p/59.94, 1080i/59.94*
  - 1080i/60, 1080p/29.97, 720p/29.97
  - 1080i/50, 1080p/50, 720p/50, 1080p/50, 1080i/50, 1080p/25*
  - 1080/23.98p, 1080/24, 1080/25

**Audio Processing**

- **Input Connectors**
  - AUDIO IN: -10 dBu (Maximum: +10 dBu)
- **Output Connectors**
  - PROGRAM OUT: HDMI type A
  - PREVIEW OUT: HDMI type A
  - USB STREAM: USB Type-C (TM)
  - * HDCP Supported
  - * Multi-format Supported
- **Input formats**
  - 480i/59.94, 480p/59.94, 720p/59.94, 1080p/59.94, 1080i/59.94*
  - 1080i/60, 1080p/29.97, 720p/29.97
  - 1080i/50, 1080p/50, 720p/50, 1080p/50, 1080i/50, 1080p/25*
  - 1080/23.98p, 1080/24, 1080/25

**Audio Effects**

- Input Connectors: Analog AUDIO IN 1 --2, Stereo mini-jack type x 2
  - Digital USB STREAM: USB Type-C (TM)
- Output Connectors: Audio: Analog: PHONES: Stereo mini-jack type
  - Digital: USB STREAM: USB Type-C (TM)
  - * HDCP Supported
  - * Multi-format Supported
- Input formats: 480/59.94, 480/59.94, 720/59.94, 1080/59.94, 1080/29.97
  - 720/29.97, 1080/50, 720/50, 1080/50, 1080/25*
  - 1080/23.98p, 1080/24, 1080/25

**Output formats**

- 1080/59.94, 720/59.94, 640 x 480/59.94
  - 1080/29.97, 720/29.97
  - 640 x 480/29.97
  - 1080/50, 720/50, 640 x 480/50
  - 1080/25, 720/25, 640 x 480/25
  - Uncompressed format (YUV4) and Compressed format (Motion JPEG) supported
- * FRAME RATE (USB OUT) = 59.94 Hz
  - * FRAME RATE (USB OUT) = 29.97 Hz
  - * FRAME RATE (USB OUT) = 50 Hz
  - * FRAME RATE (USB OUT) = 25 Hz

**Video Effects**

- Transition: CUT, MIX (DISSOLVE), WIPE (8 types)
- Composition: PIN (RECTANGLE, CIRCLE, DIAMOND), KEY (Luminance, Key, Chroma Key)
- Visual Effects (54 types): MOSAIC, WAVE, WAVE REPLACE, COLORPASS, NEGATIVE, COLORIZE, POSTERIZE, SILHOUETTE, EMBOS, FIND EDGES, MONOCOLOR, HUE OFFSET, SATURATION OFFSET, VALUE OFFSET
- Others: Flip horizontal, Flip vertical, Still Image Capture, Still Image Playback, Output fade (Audio, Video: WHITE or BLACK), Test pattern output

**Audio Effects**

- Panel function: Equalizer, Voice changer, Multi-band compressor, Limiter, Test tone output

**Accessories**

- Startup Guide, AC adaptor, Power cord, Cord hook
- Footswitch: BOSS FS-5U, FS-6, FS-7
- Expression Pedal: EV-5, BOSS FV-500L, FV-500H

**Options**

- Footswitch: BOSS FS-5U, FS-6, FS-7
- Expression Pedal: EV-5, BOSS FV-500L, FV-500H

**Power Supply**

- AC Adaptor

**Power Consumption**

- 12.6 W

**Temperature**

- +0 to +40 degrees Celsius, +32 to +104 degrees Fahrenheit

**Dimensions**

- 160 (W) x 108 (D) x 51 (H) mm
- 6-7/8 (W) x 4-1/4 (D) x 2-1/16 (H) inches

**Weight**

- 0.6 kg, 1 lbs 6 oz

**Options (sold separately)**

- Expression Pedal: EV-5, BOSS FV-500L, FV-500H

**Others**

- * Output Level (USB OUT) = 10 dBu (Maximum: +10 dBu)
- * Output Impedance (USB OUT) = 10 k ohms
- * USB STREAM: USB Type-C (TM)

**Power Supply**

- AC Adaptor

**Power Consumption**

- 12.6 W

**Temperature**

- +0 to +40 degrees Celsius, +32 to +104 degrees Fahrenheit

**Dimensions**

- 160 (W) x 108 (D) x 51 (H) mm
- 6-7/8 (W) x 4-1/4 (D) x 2-1/16 (H) inches

**Weight**

- 0.6 kg, 1 lbs 6 oz

**Options (sold separately)**

- Expression Pedal: EV-5, BOSS FV-500L, FV-500H

**Others**

- * Output Level (USB OUT) = 10 dBu (Maximum: +10 dBu)
- * Output Impedance (USB OUT) = 10 k ohms
- * USB STREAM: USB Type-C (TM)

**Power Supply**

- AC Adaptor

**Power Consumption**

- 12.6 W

**Temperature**

- +0 to +40 degrees Celsius, +32 to +104 degrees Fahrenheit

**Dimensions**

- 160 (W) x 108 (D) x 51 (H) mm
- 6-7/8 (W) x 4-1/4 (D) x 2-1/16 (H) inches

**Weight**

- 0.6 kg, 1 lbs 6 oz

**Options (sold separately)**

- Expression Pedal: EV-5, BOSS FV-500L, FV-500H

**Others**

- * Output Level (USB OUT) = 10 dBu (Maximum: +10 dBu)
- * Output Impedance (USB OUT) = 10 k ohms
- * USB STREAM: USB Type-C (TM)

**Power Supply**

- AC Adaptor

**Power Consumption**

- 12.6 W

**Temperature**

- +0 to +40 degrees Celsius, +32 to +104 degrees Fahrenheit

**Dimensions**

- 160 (W) x 108 (D) x 51 (H) mm
- 6-7/8 (W) x 4-1/4 (D) x 2-1/16 (H) inches

**Weight**

- 0.6 kg, 1 lbs 6 oz

**Options (sold separately)**

- Expression Pedal: EV-5, BOSS FV-500L, FV-500H

**Others**

- * Output Level (USB OUT) = 10 dBu (Maximum: +10 dBu)
- * Output Impedance (USB OUT) = 10 k ohms
- * USB STREAM: USB Type-C (TM)

**Power Supply**

- AC Adaptor

**Power Consumption**

- 12.6 W

**Temperature**

- +0 to +40 degrees Celsius, +32 to +104 degrees Fahrenheit

**Dimensions**

- 160 (W) x 108 (D) x 51 (H) mm
- 6-7/8 (W) x 4-1/4 (D) x 2-1/16 (H) inches

**Weight**

- 0.6 kg, 1 lbs 6 oz

**Options (sold separately)**

- Expression Pedal: EV-5, BOSS FV-500L, FV-500H

**Others**

- * Output Level (USB OUT) = 10 dBu (Maximum: +10 dBu)
- * Output Impedance (USB OUT) = 10 k ohms
- * USB STREAM: USB Type-C (TM)
Unlock new creative possibilities

- All HDMI workflow
- Built-in multi-viewer preview monitor
- Execute smooth transitions using the T-bar fader
- Powerful live production automation with sequencing, macros, and preset memories (version 2.0)
- Eight-slot still store function supports screen capture and import of BMP, JPEG and transparent PNG images to internal non-volatile memory
- Ultra-mobile, lightweight, and efficient

- Five-layer effects and keying engine
- Aux output for a different video feed
- Technology-assisted automatic video switching
- Newly supported 23.98Hz, 24Hz, 25Hz, 29.97Hz, 30Hz of output formats (version 2.0)
- 18-channel digital audio mixer with a wide range of effects, including sync delay on each channel
- Remote start and stop of Atomos recorders
- Free iPad remote control app available
Versatile, portable, and reliable, the Roland V-8HD brings a world of creative options to live event switching. Its all-in-one hardware design eliminates computer setup hassles and software-based crashes, while the HDMI workflow and loaded professional toolset streamline production and reduce stress on the gig.

**Maximum connectivity**

Nearly all modern cameras and digital video devices use HDMI, the most common AV connector on the planet. The V-8HD seamlessly mixes eight HDMI sources with Full HD support, even when the sources have mismatched frame rates and color spaces. And with the built-in scalers on two of the HDMI inputs, you can easily interface with client-provided sources like computers, tablets, smartphones, gaming consoles, and legacy 4:3 devices.

**The power of more**

Creative professionals need more video inputs for layered graphics and visual effects, and business professionals often need multiple backup video sources. Having the ability to meet all these needs brings satisfied clients and greater audience engagement. With the V-8HD’s generous number of HDMI inputs and outputs, you’re able to offer clients a vast amount of creative freedom—without increasing the budget.
Set up layers, effects, and keys

Video effects, layers, and graphics add polish and excitement to any production. With the V-8HD’s five composition layers, you’ll always keep audiences engaged with visually appealing content. Prepare the content according to client specifications and separate it into layers: Layer 1 and 2: Start by creating a basic background setup for mixing between two sources. Layer 3 and 4: Drop in two picture-in-picture layers with chroma and luminance effects. Layer 5: Add one downstream keyer layer with chroma, luminance, and [Version 2.0] alpha effects or external fill and key inputs.

Automated video switching

The V-8HD makes your job easier with three technology assisted automatic switching modes. Input Scan switches input sources randomly or in sequence, while Preset Memory Scan switches between preset memories. BPM (beats per minute) sync is also available, automatically switching Preview and Program at a specified tempo for tight synchronization with musical cues.

One-touch automation (version 2.0)

The V-8HD’s newly developed sequencer makes presets and macros even more powerful, allowing a single operator to execute perfectly timed cues with ease. Up to 1000 steps can be recorded in the sequencer, and each step can include both presets and macros. Simply set up your cues ahead of time in the sequence list and trigger them in order by pressing a button on the panel. With the power of the V-8HD’s sequencer, you can tackle the most complex events without ever breaking a sweat.

Instant recall with memories and macros

With the V-8HD, storing and recalling unique looks requires only a few button presses. The 24 preset memories and powerful composition effects engine work together to provide a completely seamless load between different looks, including synchronizing the transition of all effect layers on and off at the Program output. [Version 2.0] The 100 macros go even deeper, allowing you to build and trigger complex action lists that include switching, DSK on/off, audio mixing adjustments, and much more. Our free remote control software for iPad further enhances this workflow, providing a large graphical interface for setting up and previewing actions before you take them live.
V-8HD iPad remote control utility

The dedicated V-8HD remote control app turns an iPad into an efficient touch interface for the V-8HD. Run essential switching functions, mix audio with virtual faders, change settings and effect parameters quickly, and create up to 24 custom scenes for fast, efficient setup changes.

**SPECIFICATIONS V-8HD**

**VIDEO**

<table>
<thead>
<tr>
<th>Video Processing</th>
<th>4:2:2 (Y/Pb/Pr), 8-bit</th>
</tr>
</thead>
</table>

**Input Connectors**

- INPUT 1–8: HDMI type A x 8
- * HDCP Supported
- * Input 7–8: HDMI type A x 2
- * HDCP Supported
- * Multi-format Supported

**Output Connectors**

- OUTPUT 1–3: HDMI type A x 3
- * HDCP Supported

**Supported Video Formats**

- 480/59.94, 480/59.94p, 720/59.94, 720/60p
- 576/50i, 576/50p, 720/50p, 1080/50p, 1080/50i
- 1080/23.98p, 1080/24p
- *1 Frame rate is the maximum value of each resolution
- **Connects to CEA-861-E, VESA DMT Version 1.0 Revision 10**
- **Input interlaced video signal is converted to progressive video signal by internal processing.**
- **Conforms to CEA-861-E, VESA DMT Version 1.0 Revision 10.**

**Still Image**

- Bitmap Files (bmp)
- Maximum 1920 x 1080 pixels, 24-bit color, uncompressed
- PNG files (png) Maximum 1920 x 1080 pixels, 24-bit color
- JPEG files (jpg, jpeg) Maximum 1920 x 1080 pixels, 24-bit color
- * Can be stored up to 8 files to the internal memory
- * Can be exported to the USB memory
- * PNG alpha channel supported (Exclusive with alpha bus or AUX bus)

**Output Formats**

- OUTPUT 1-2: 720/59.94p, 720/60p, 1080/59.94, 1080/60i, 1080/59.94, 1080/60p, 1080/29.97, 1080/30p
- 1080/23.98p, 1080/24p
- *1 Frame rate is the maximum value of each resolution
- **Connects to CEA-861-E, VESA DMT Version 1.0 Revision 10.**
- **Input interlaced video signal is converted to progressive video signal by internal processing.**
- **Conforms to CEA-861-E, VESA DMT Version 1.0 Revision 10.**

**Video Effects**

- Composition: PinP x 2 (SQUARE,CIRCLE,DIAMOND), SPLIT (2 types), Keyer x 2 (Luminance Key, Chroma Key), DDK (Luminance Key, Chroma Key, Alpha Key *1, External Key *1)
- Other functions: Flip horizontal, Flip vertical, Still Image Capture, Still Image Playback, Output fade (Audio, Video: WHITE or BLACK), Test pattern output
- *1 Exclusive with alpha bus or AUX bus

**AUDIO**

- Sampling rate: 24 kHz/48 kHz
- Linear PCM, 24 bits/48 kHz
- Audio Effects: Delay, High pass filter, Compressor, Noise gate, Equalizer, Multi-band compressor, Limiter

**CONNECTORS**

- Input Connectors: INPUT 1–8: HDMI Type A x 8
- AUDIO IN: RCA phono type
- Output Connectors: OUTPUT 1–3: HDMI Type A x 3
- AUDIO OUT: RCA phono type
- PHONES: Stereo miniature type
- Remotes: USB MEMORY: USB type A (for USB flash drive)
- REMOTE: USB Type B (for remote control from iPad)
- CRT/EXP: 1/4-inch TRS phone type
- Other Functions: Preset Memory (24 scenes), Macro Control (500 types), Sequencer Control, Panel lock function, EDID Emulator, Auto Switching, Auto Input Detect, Rec Control

**AUDIO INPUT/OUTPUT CHARACTERISTICS**

- **Input Level**: AUDIO IN: -10 dBu (Maximum: +8 dBu)
- **Input Impedance**: AUDIO IN: 3.3 k ohms
- **Output Level**: AUDIO OUT: +10 dBu (Maximum: +8 dBu)
- **Output Impedance**: AUDIO OUT: 1 k ohm
- **PHONES**: 92 mV

**OTHERS**

- Display: 4.3 inches TFT Color LCD: 480 x 272 dots
- Power Supply: AC Adapter
- Current Draw: 3.3 A
- Power Consumption: 39.6 W
- Operating Temp.: -10 to +40 degrees Celsius, -32 to +104 degrees Fahrenheit
- Dimensions: 187 (W) x 193 (D) x 20 (H) mm
- Weight: 2.0 kg / 4 lbs 7 oz * Excluding AC adapter

**ACCESSORIES**

- Owner’s Manual, AC adapter, Power cord

**Record triggering and confirmation**

Many technical elements contribute to a successful recording. But forgetting to hit the record button means the difference between getting paid for the job or not. Via HDMI, the V-8HD operator can trigger Atomos recorders to start and stop recording. And some camcorders even display a recording confirmation Icon on the input channel of the V-8HD’s multi-viewer screen, letting you keep an eye on the recording status while staying focused on other critical tasks.
V-160HD STREAMING VIDEO SWITCHER

The new standard in hybrid event switching

- Portable hybrid event switcher with comprehensive features and connectivity
- Seven selectable output modes: Program, Sub-Program, Aux, Preview, and three multi-view options
- Eight-layer video effects engine
- Powerful live production automation with sequencing, macros, and preset memories
- Extensive device control with Bluetooth, USB, RS-232, and LAN
- Wireless and wired camera tally support
- Eight 3G SDI inputs with frame rate converters
- Eight 1080p HDMI inputs with frame rate converters, including four with real-time scalers
- Seven total outputs across SDI, HDMI, and USB-C streaming
- 40-channel digital audio mixer with effects and processing
- 16-slot still store function supports screen capture or uploaded BMP, JPEG, and PNG images via alpha channel in the internal non-volatile memory
- PTZ control with support for multiple brands and mixed protocols running at once
- Remote control software for iPad, macOS, and Windows
Hybrid to the max

The V-160HD combines the robust hardware needed to flawlessly execute live productions with the livestreaming capabilities found in computer-based systems. While software workflows are fine for online-only events, the V-160HD delivers the pro essentials you need for both the in-person and streaming components of a live hybrid event, complete with the ability to tailor the content for each audience. On-demand signal processing means you never have to worry about issues like computer CPU overhead, latency, and output delay on live audience screens. Integrated connectivity standards like SDI, HDMI, XLR, and USB-C eliminate the need to build out costly infrastructure and conversion processes. The comprehensive interface provides hands-on controls that can be learned quickly by a single operator. Presets, macros, and advanced sequencing features let you set up and automate complex switching tasks with one touch.

Stream live

The V-160HD uses the same connection technology as webcams,* allowing you to stream events at 30/60 FPS in Full HD** and reach a worldwide audience. Simply connect the USB-C output to a computer and start streaming with Zoom, Microsoft Teams, YouTube, Facebook Live, or any platform that can use a webcam as its source. Everything is plug and play, with no driver installation needed.

*USB video class (UVC) and USB audio class (UAC) compliant.
**YUV2 (uncompressed) and Motion JPEG (compressed) formats supported.

One-touch automation

The V-160HD’s newly developed sequencer makes presets and macros even more powerful, allowing a single operator to execute perfectly timed cues with ease. Up to 1000 steps can be recorded in the sequencer, and each step can include both presets and macros. Simply set up your cues ahead of time in the sequence list and trigger them in order using the Next button on the panel. With the power of the V-160HD’s sequencer, you can tackle the most complex events without ever breaking a sweat.

HDMI and SDI connectivity

The V-160HD supports HDMI for common A/V devices plus SDI for long cable runs and high-end cameras. Seamlessly mix eight HDMI sources and eight SDI sources in Full HD, even with mismatched frame rates and color spaces. And with built-in scalers on four of the HDMI inputs, you can easily interface with client-provided sources like computers, tablets, smartphones, gaming consoles, and legacy 4:3 devices.
Powerful video effects engine

Video effects and graphics are must-haves to bring polish and excitement to any production. The V-160HD’s effects engine features eight composition layers that can be assigned to the Program and Sub-Program outs, so you’ll always keep audiences engaged with visually appealing content. With up to four picture-in-picture windows, downstream key layers, 16 still store slots with transparent PNG image support, and more, you can manage the creative needs of any client.

For example:
Layers 1-2: Start with a mixable live background video layer.
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.

Instant recall

Storing and recalling custom looks can be accomplished with just a few button presses on the V-160HD. The 30 preset memories and powerful effects engine work together to provide seamless scene changes, including synchronizing the transition of all composition layers at the program output. The 100 macros go even deeper, allowing you to build and fire off complex action lists that include switching, DSK on/off, audio mixing adjustments, PTZ camera movements, and much more. Our free remote control software for macOS, Windows, and iPad further enhances this workflow, providing a large graphical interface for setting up and previewing actions before you take them live.
Robotic PTZ (pan-tilt-zoom) cameras eliminate the need for multiple camera operators, provide great production coverage with studio-grade broadcast quality, and can be placed in discreet locations thanks to their small size. The V-160HD includes built-in support to directly control 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 16 PTZ cameras simultaneously.

**V-160HD iPad remote control utility**

The dedicated V-160HD remote control app turns an iPad into an efficient touch interface for the V-160HD. Run essential switching functions, mix audio with virtual faders, change settings and parameters quickly and create up to 30 custom scenes for fast, efficient setup changes.
<table>
<thead>
<tr>
<th>Product Page</th>
<th>V-02HD MK II</th>
<th>V-1HD</th>
<th>V-1HDC</th>
<th>V-1SDI</th>
<th>V-60HD</th>
<th>V-8HD</th>
<th>V-160HD</th>
<th>V-600UHD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Processing</td>
<td>1080/60p</td>
<td>1080/60p</td>
<td>1080/60p</td>
<td>1080/60p</td>
<td>1080/60p</td>
<td>1080/60p</td>
<td>1080/60p</td>
<td>4K/60p</td>
</tr>
<tr>
<td>HDMI Video Input</td>
<td>2 (2 x scalers)</td>
<td>4</td>
<td>4 (1 x scaler)</td>
<td>2 (1 x scaler)</td>
<td>2 (2 x scalers)</td>
<td>8 (2 x scalers)</td>
<td>8 (4 x scalers)</td>
<td>4 (4 x scalers)</td>
</tr>
<tr>
<td>HDMI Video Output</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>SDI Video Input</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>3</td>
<td>4</td>
<td>–</td>
<td>–</td>
<td>8 (2 x scalers)</td>
</tr>
<tr>
<td>SDI Video Output</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>2</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td>RGB/Component Video Input</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>Stream/Record USB to Computer</td>
<td>✔ USB-C Up to 1080/60p</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Scene Memory Presets</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>24 Memories, 100 Macros</td>
<td>30 Memories, 100 Macros</td>
<td>64</td>
</tr>
<tr>
<td>Analog Audio Input</td>
<td>Stereo Mini x 2</td>
<td>RCA stereo x 1 Stereo Mini x 1</td>
<td>RCA stereo x 1 Stereo Mini x 1</td>
<td>RCA stereo x 1 Stereo Mini x 1</td>
<td>RCA stereo x 1 XLR x 2</td>
<td>RCA stereo x 1 XLR/TRS x 4</td>
<td>RCA stereo x 1 XLR x 2</td>
<td>XLR x 2</td>
</tr>
<tr>
<td>Analog Audio Output</td>
<td>Phones x 1</td>
<td>RCA stereo x 1 Phones x 1</td>
<td>RCA stereo x 1 RCA stereo x 1 Phones x 1</td>
<td>RCA stereo x 1 RCA stereo x 1 Phones x 1</td>
<td>RCA stereo x 1 RCA stereo x 1 Phones x 1</td>
<td>RCA stereo x 1 RCA stereo x 1 Phones x 1</td>
<td>RCA stereo x 1 Phones x 1</td>
<td>Phones x 1</td>
</tr>
<tr>
<td>Audio Mixer</td>
<td>10 channels</td>
<td>12 channels</td>
<td>14 channels</td>
<td>14 channels</td>
<td>18 channels</td>
<td>18 channels</td>
<td>40 Input Channels, 18 Output Channels</td>
<td>16 channels</td>
</tr>
<tr>
<td>PIP</td>
<td>1 (variable zoom)</td>
<td>1 (1/2, 1/3 or 1/4)</td>
<td>1 (variable zoom)</td>
<td>1 (1/2, 1/3 or 1/4)</td>
<td>1 (1/2, 1/3 or 1/4)</td>
<td>2 (variable zoom)</td>
<td>4 (variable zoom)</td>
<td>2 (variable zoom)</td>
</tr>
<tr>
<td>Key Layers</td>
<td>1 PIP (Luma, Chroma), 1 DSK (Luma, Chroma)</td>
<td>1 PIP (Luma, Chroma), 1 DSK (Luma, Chroma)</td>
<td>1 PIP (Luma, Chroma), 1 DSK (Luma, Chroma)</td>
<td>1 PIP (Luma, Chroma), 1 DSK (Luma, Chroma)</td>
<td>2 PIP (Luma, Chroma), 1 DSK (Luma, Chroma, Alpha)</td>
<td>2 PIP (Luma, Chroma), 2 DSK (Luma, Chroma, Alpha)</td>
<td>4 PIP (Luma, Chroma), 2 DSK (Luma, Chroma, Alpha)</td>
<td>2 PIP (Luma, Chroma)</td>
</tr>
<tr>
<td>Video Effects</td>
<td>✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Effects</td>
<td>11 types</td>
<td>7 types</td>
<td>9 types</td>
<td>7 types</td>
<td>8 types</td>
<td>8 types</td>
<td>14 types</td>
<td>–</td>
</tr>
<tr>
<td>AUX Bus</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>✔ ✔ ✔ ✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Still Image</td>
<td>✔ (1 Still)</td>
<td>✔ (4 Stills)</td>
<td>✔ (1 Still)</td>
<td>✔ (2 Stills)</td>
<td>✔ (8 Stills)</td>
<td>✔ (16 Stills)</td>
<td>✔ (16 Stills)</td>
<td>–</td>
</tr>
<tr>
<td>Capture Image</td>
<td>✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camera Battery Support</td>
<td>✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PZT Camera Control</td>
<td>✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remote Control</td>
<td>iPad RCS, PC RCS (Win/Mac), MIDI (USB)</td>
<td>iPad RCS, PC RCS (Win/Mac), MIDI (6-Pin/USB)</td>
<td>iPad RCS, RS-232</td>
<td>PC RCS (Win/Mac), RS-232, LAN, RS-232</td>
<td>PC RCS (Win/Mac), RS-232, LAN, RS-232</td>
<td>iPad RCS, PC RCS (Win/Mac), MIDI (USB)</td>
<td>iPad RCS, PC RCS (Win/Mac), PC RCS (Win/Mac), LAN, RS-232</td>
<td>Web RCS, LAN, RS-232</td>
</tr>
<tr>
<td>Footswitch Control</td>
<td>Single or double x 1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Single or double x 2</td>
<td>Single or double x 2</td>
<td>–</td>
</tr>
<tr>
<td>Tally</td>
<td>–</td>
<td>–</td>
<td>9 Pin</td>
<td>–</td>
<td>25 Pin, LAN (PTZ Only)</td>
<td>–</td>
<td>25 Pin, LAN (PTZ Only)</td>
<td>25 Pin, LAN (PTZ Only)</td>
</tr>
<tr>
<td>Product Page</td>
<td>SR-20HD</td>
<td>VR-1HD</td>
<td>VR-6HD</td>
<td>VR-120HD</td>
<td>VR-400UHD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>---------</td>
<td>--------</td>
<td>--------</td>
<td>----------</td>
<td>----------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Video Processing</strong></td>
<td>1080/60p</td>
<td>1080/60p</td>
<td>1080/60p</td>
<td>1080/60p</td>
<td>4K/60p</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HDMI Video Input</strong></td>
<td>2 (2 x scalers)</td>
<td>3 (3 x scalers)</td>
<td>6 (6 x scalers)</td>
<td>6 (6 x scalers)</td>
<td>4 (3 inputs + 1 inputs from 4 connectors, 6 x scalers)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HDMI Video Output</strong></td>
<td>2 (Main, Monitor) 3 (Main, Monitor) and Input 3 Loop</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SDI Video Input</strong></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>6</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SDI Video Output</strong></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>3</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stream/Record USB to Computer</strong></td>
<td>–</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stream/Record Directly from LAN</strong></td>
<td>✔</td>
<td>–</td>
<td>✔</td>
<td>✔</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Record Internally to SD card</strong></td>
<td>✔</td>
<td>–</td>
<td>✔</td>
<td>✔</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Video Playback</strong></td>
<td>✔</td>
<td>–</td>
<td>✔</td>
<td>✔</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Scene Memory Presets</strong></td>
<td>5</td>
<td>–</td>
<td>32 Memories, 100 Macros</td>
<td>32 Memories, 100 Macros</td>
<td>64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Analog Audio Input</strong></td>
<td>RCA stereo x 1, XLR / TRS x 4</td>
<td>RCA stereo x 1 XLR / TRS x 2</td>
<td>RCA stereo x 1 XLR / TRS x 6</td>
<td>RCA stereo x 2 XLR / TRS x 6</td>
<td>RCA stereo x 2 XLR / TRS x 4 ( \text{TRS x 2} )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Analog Audio Output</strong></td>
<td>RCA stereo x 1 Phones x 1 Headset x 1</td>
<td>RCA stereo x 1 Phones x 1</td>
<td>XLR stereo x 1 RCA stereo x 1 Phones x 1</td>
<td>XLR stereo x 2 RCA stereo x 1 Phones x 2</td>
<td>XLR stereo x 1 RCA stereo x 1 Phones x 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Audio Mixer</strong></td>
<td>15 channels</td>
<td>20 channels</td>
<td>28 channels (Faders are assignable)</td>
<td>42 channels (Faders are assignable)</td>
<td>16 channels (5/6 are assignable)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PIP</strong></td>
<td>1 (variable zoom)</td>
<td>1 (variable zoom)</td>
<td>2 (variable zoom)</td>
<td>4 (variable zoom)</td>
<td>2 (variable zoom)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Key Layers</strong></td>
<td>1 DSK (Luma, Chroma)</td>
<td>1 DSK (Luma, Chroma)</td>
<td>2 PIP (Luma, Chroma), 1 DSK (Luma, Chroma, Alpha)</td>
<td>4 PIP (Luma, Chroma), 2 DSK (Luma, Chroma, Alpha)</td>
<td>1 DSK (Luma, Chroma, Alpha*), 1 LOGO (Luma, Chroma, Alpha*) *Still image only.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Video Effects</strong></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Audio Effects</strong></td>
<td>7 types</td>
<td>11 types</td>
<td>18 types</td>
<td>18 types</td>
<td>14 types</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Audio Playback</strong></td>
<td>✔</td>
<td>✔</td>
<td>(6 Pads)</td>
<td>(8 Pads)</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AUX BUS</strong></td>
<td>–</td>
<td>–</td>
<td>✔</td>
<td>✔</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Still Image</strong></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Capture Image</strong></td>
<td>✔</td>
<td>–</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PTZ Camera Control</strong></td>
<td>–</td>
<td>–</td>
<td>(6 Cameras)</td>
<td>(12 Cameras)</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Remote Control</strong></td>
<td>–</td>
<td>PC RCS (Win/Mac)</td>
<td>iPad RCS, PC RCS (Win/Mac), LAN, RS-232</td>
<td>iPad RCS, PC RCS (Win/Mac), LAN, RS-232</td>
<td>Web RCS, LAN, RS-232</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Footswitch Control</strong></td>
<td>–</td>
<td>–</td>
<td>Single or Double x 2</td>
<td>Single or Double x 2</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tally</strong></td>
<td>–</td>
<td>–</td>
<td>25 Pin</td>
<td>25 Pin</td>
<td>15 Pin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Automation Tools</strong></td>
<td>Audio Follows Video, Auto Mixing, Video Follows Audio</td>
<td>Audio Follows Video, Auto Mixing, Video Follows Audio</td>
<td>Audio Follows Video, Auto Mixing, Macros, Sequencer, Video Follows Audio</td>
<td>Audio Follows Video, Auto Mixing, Macros, Sequencer, Video Follows Audio</td>
<td>Audio Follows Video, Auto Mixing, Video Follows Audio</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Intuitive 4K workflow with dual touchscreens

- Professional 4K AV command center with dual touchscreens
- Integrated production solution: video switching, audio mixing, and USB streaming
- Scene function for complex video compositions
- Monitor up to eight scenes at once
- Save up to 64 scenes (eight scenes and eight banks)
- Composite two picture-in-picture/key layers on top of background images using scenes
- Composite a DSK image on the picture-in-picture/key layers and background independently from scenes
- Seven HDMI inputs supporting rates up to 4K/60p
- Multiple resolutions supported: 4K/60p, HDR (Rec.2020) up to 1080/60p, and SDR (Rec.709)
- Freely combine 4K/FHD, HDR/SDR, and Rec.2020/Rec.709 formats with built-in scalers on the HDMI inputs and outputs
- Import BMP, JPEG, and PNG images from USB media into eight internal memories (PNG alpha channel supported)
- Region of Interest (ROI) function
- Seamlessly switch between two scenes in PGM/PST mode
- Use Dual mode to send different scenes to each of the two touch displays
- 14-channel digital audio mixer with advanced effects
- Four XLR/TRS combo inputs with phantom power, two TRS mic inputs, and two stereo RCA line inputs
- USB-C webcam output with support for streaming up to 4K/30fps
- Selectable languages for the user interface
Present and livestream in 4K

The VR-400UHD supports 4K/60fps—the standard for high-quality video—allowing you to connect 4K cameras and feed 4K displays and recorders. HDR and SDR formats are also supported, with automatic conversion into your 4K workflow. And with the USB-C webcam output* and integrated USB 3.2 Gen 2 support, you can simultaneously livestream to popular platforms on your computer.

*Supports SDR video up to 4K/30p only.

Automatically follow the action

When there are many presenters, you need to follow the action and switch audio and video together. The automated video switching and audio mixing features in the VR-400UHD make this complicated task simple, greatly easing your workload and creating a smooth production experience.

Touch and go

Two seven-inch touchscreens make it simple to monitor video content and execute operations with quick touches. In the default PGM/PST mode, you can monitor and select up to eight video scenes on the right screen and access various video switching and audio functions on the left. Switching to Dual mode allows you to send video to both displays, which is ideal for events where you need to operate multiple presentation screens at once.

The VR-400UHD is a powerful and intuitive solution for managing complex production tasks during in-person and livestreaming events. Side-by-side touchscreens provide fast, direct control of your workflow in the heat of the moment, letting you monitor live video thumbnails, switch composite video scenes, access audio mixing and video routing functions, and much more. Versatile onboard AV connectivity provides the I/O you need to manage everyday production needs with one compact unit. And with full 4K HDMI and USB streaming support, you're always ready to deliver the highest video quality for your clients and audience.

Multi-channel audio inputs

Comprehensive analog audio connectivity includes four balanced XLR/TRS combination jacks with high-quality mic preamps and phantom power. Two additional mic inputs are available on TRS jacks, plus two stereo RCA input pairs for connecting line-level devices. It’s also possible to mix the embedded digital audio from sources connected via HDMI and USB.
The VR-400UHD is equipped with a professional audio mixer with 14 simultaneous channels and a full complement of acclaimed Roland sound-shaping tools. Comprehensive analog audio connectivity includes four balanced XLR/TRS combination jacks with high-quality mic preamps and phantom power. Two additional mic inputs are available on TRS jacks, plus two stereo RCA input pairs for connecting line-level devices.
Two touchscreen modes

In PGM/PST mode, you can switch between scenes using transition effects such as cuts, dissolves, and wipes for a polished look. Eight banks provide a total of 64 scenes, with eight scenes at a time displayed on the right touch display. Using Dual mode, you can display PGM on the right screen and PGM2 on the left and assign them to HDMI and USB outputs.* This is ideal for working with separate LED panels on the left and right sides of a stage, allowing you to monitor and control both at once.

*Only freeze cut transition effects are available in Dual mode.

Seven 4K HDMI inputs

The VR-400UHD is equipped with seven HDMI inputs with up to 4K60p resolution, and you can use up to four inputs at once to create video compositions. Inputs 1–3 are always available, while cameras and other devices connected to the additional four inputs can be selected one at a time as needed. All inputs feature built-in scalers, letting you freely mix 4K/HD, HDR/SDR, and Rec.2020/Rec.709 devices with no need to worry about format conversion.

SPECIFICATIONS VR-400HD

**VIDEO**

- **Video Processing**
  - 4:2:2 (YCbCr/PxP), 10-bit

- **Video Channels**
  - 4 channels

- **Video Input Formats**
  - HDMI 4K: 2160p/60 Hz, 59.94 Hz, 50 Hz, 30 Hz, 29.97 Hz, 25 Hz, 24 Hz, 23.98 Hz, 1080p/60 Hz, 59.94 Hz, 50 Hz, 30 Hz, 29.97 Hz, 25 Hz, 24 Hz, 23.98 Hz, 1080/59.94 Hz, 50 Hz, 720p/60 Hz, 59.94 Hz, 50 Hz
  - *HDCP 1.4, 2 supported
  - *Conforms to CEA-861-F
  - *Color Gamut: Rec.709, Rec.2020
  - *Dynamic Range: SDR, HDR PQ (HDR10), HDR HLG

- **Video Output Formats**
  - 4K STREAMING: 960 x 540, 1280 x 720, 1020 x 1080, 2560 x 1440, 3840 x 2160
  - *Frame Rate: 25 Hz, 29.97 Hz, 30 Hz, 50 Hz, 60 Hz

- **Still Image**
  - Bitmap File (.bmp) Maximum 3840 x 2160 pixels, 24-bit color, uncompressed
  - JPEG File (.jpg) Maximum 3840 x 2160 pixels, 24-bit color
  - PNG File (.png) Maximum 3840 x 2160 pixels, 24-bit color
  - *PNG alpha channel supported

- **Video Effects**
  - Transition: Mix, Wipe (6 patterns)
  - Composition: Background, Layer (PnP = Key), Layer (PnP = Key), Key (Key, Key), Logo (Logo), Logo
  - *Multi-View: Output Fade, Output Freeze, Output Capture, Still Image playback, Test pattern output
  - *1 Chrominance Key, Luminance Key
  - *2 Chrominance Key, Luminance Key,Still image alpha channel
  - *3 Chrominance Key, Luminance Key,Still alpha channel for 4K STREAMING Only. Maximum size 1920 x 1080.

**CONNECTORS**

- **Audio Input Connectors**
  - *HDMI 4 IN 1-3, 4-1-4-4: HDMI type A (HDMI 2.0) x 1
  - *HDCP 1.4, 2 Supported
  - *Multi-format Supported

- **Audio Output Connectors**
  - Analog: AUDIO OUT AUX 1-4: RCA phone type
  - Digital: 4K STREAMING: USB type-C (R)
  - 4K STREAMING: USB type-C (R)

- **Audio Input Connectors**
  - Analog: AUDIO IN 5-6: 1/4-inch TRS phone balanced, phantom power (DC 48 V, 10 mA Max)
  - Audio Mic IN 1-6: -64--+4 dBu (Maximum input level: +24 dBu)

- **Audio Output Connectors**
  - Analog: AUDIO OUT MAIN (L, R): +4 dBu (Maximum output level: +24 dBu)
  - Audio Mic IN 1-6: -57 dBu (Maximum output level: +24 dBu)
  - Audio Mic IN 1-6: 16 k ohms (phantom power OFF), 8 k ohms (phantom power ON)

**COMMON SECTION**

- **Power Supply**
  - AC 115 V, AC 117 V, AC 220 V, AC 230 V, AC 240 V (50/60 Hz)

- **Power Consumption**
  - 115 W

- **Operation Temperature**
  - -5°C to +40 degrees Celsius

- **Dimensions**
  - 373 (W) x 279 (D) x 137 (H) mm, 15-7/16 (W) x 11 (D) x 5-7/16 (H) inches

- **Weight**
  - 6.8 kg, 15 lbs

**OTHERS**

- **Display**
  - 7 inch Graphic color LCD 800 x 480 dots (touch screen)

- **Power Supply**
  - 115 V

- **Power Consumption**
  - 115 W

- **Operation Temperature**
  - -5°C to +40 °C

- **Dimensions**
  - 373 (W) x 279 (D) x 137 (H) mm, 15-7/16 (W) x 11 (D) x 5-7/16 (H) inches

- **Weight**
  - 6.8 kg, 15 lbs

- **Accessories**
  - Startup Guide, Power cord

- **Others**
  - * This product is a Class A digital device under FCC part 15.

  All specifications and appearances are subject to change.
VR-120HD

One operator, multiple audiences

- Portable hybrid event audio/video mixer with direct streaming encoders
- 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 via 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 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.

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.

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.

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.

HDMI AND SDI INPUTS
The VR-120HD supports both HDMI for common AV 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.
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.

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.
### SPECIFICATIONS VR-120HD

#### AUDIO

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Level</strong></td>
<td>AUDIO IN 1-6: -64 dBu (Maximum: +24 dBu), AUDIO IN 7, 8: BR: -10 dBu (Maximum: +24 dBu), AUDIO IN 9, 10: -20 dBu (Maximum: +40 dBu)</td>
</tr>
<tr>
<td><strong>Output Level</strong></td>
<td>AUDIO OUT 1 (XLR): -44 dBu (Maximum: +24 dBu), AUDIO OUT 2 (XLR): -44 dBu (Maximum: +24 dBu)</td>
</tr>
<tr>
<td><strong>Output Impedance</strong></td>
<td>PHONES: 92 mW &amp; 92 mW (32 Ohms)</td>
</tr>
<tr>
<td><strong>Residual Noise Level (HF-A, typ.)</strong></td>
<td>dBu (All faders: Min), -69 dBu (MAIN)</td>
</tr>
</tbody>
</table>

#### VIDEO

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Audio Channels</strong></td>
<td>42 channels</td>
</tr>
<tr>
<td><strong>Number of Video Channels</strong></td>
<td>12 channels</td>
</tr>
<tr>
<td><strong>Audio Processing</strong></td>
<td>Sample rate: 24 bits, 48 kHz</td>
</tr>
<tr>
<td><strong>Video Processing</strong></td>
<td>4.2:2:2 (Y/Pb/Pr), 8-bit</td>
</tr>
<tr>
<td><strong>Video Channel</strong></td>
<td>12 channels</td>
</tr>
<tr>
<td><strong>Audio Input</strong></td>
<td>USB STREAM: USB Type-C (R), Bluetooth, HDMI IN 1--6: HDMI type A x 6, SDI IN 1--6: BNC type x 6</td>
</tr>
<tr>
<td><strong>Audio Output</strong></td>
<td>USB STREAM: USB Type-C (R), HDMI OUT 1--3: HDMI type A x 3, SDI OUT 1--3: SDI type</td>
</tr>
<tr>
<td><strong>Video Input</strong></td>
<td>HDMI IN 1--6: 1080/60p, 1080/29.97p, 1080/25p, 1080/24p, 1080/23.98p, 1080/24p</td>
</tr>
<tr>
<td><strong>Video Output</strong></td>
<td>HDMI OUT 1--3: 1080/59.94p, 1080/50p, 1080/29.97p, 1080/25p, 1080/24p, 1080/23.98p</td>
</tr>
</tbody>
</table>

#### COMMON SECTION

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power Supply</strong></td>
<td>DC 6.5 V/1.31 A (USB)</td>
</tr>
<tr>
<td><strong>Power Consumption</strong></td>
<td>425M-AB)</td>
</tr>
<tr>
<td><strong>Operation Temperature</strong></td>
<td>-10 to +40 degrees Celsius</td>
</tr>
<tr>
<td><strong>Operation Humidity</strong></td>
<td>30 to 90% (non-condensing)</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>437 (W) x 304 (H) x 124 (D) mm, 17.2 (W) x 12.0 (H) x 4.9 (D) inches</td>
</tr>
<tr>
<td><strong>Weight (incl. AC adaptor)</strong></td>
<td>5.3 kg, 11.7 lbs</td>
</tr>
</tbody>
</table>

#### OTHERS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accessories</strong></td>
<td>Footswitch: BOSS FS-5U, FS-6, FS-7</td>
</tr>
</tbody>
</table>

*This product is a Class A digital device under FCC part 15.*

All specifications and appearances are subject to change.

---

### AUDIO INPUT/OUTPUT CHARACTERISTICS

<table>
<thead>
<tr>
<th>Input Level</th>
<th>AUDIO IN 1-6: -64 dBu (Maximum: +24 dBu), AUDIO IN 7, 8: BR: -10 dBu (Maximum: +24 dBu), AUDIO IN 9, 10: -20 dBu (Maximum: +40 dBu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Level</td>
<td>AUDIO OUT 1 (XLR): -44 dBu (Maximum: +24 dBu), AUDIO OUT 2 (XLR): -44 dBu (Maximum: +24 dBu)</td>
</tr>
<tr>
<td>Impedance</td>
<td>PHONES: 92 mW &amp; 92 mW (32 Ohms)</td>
</tr>
</tbody>
</table>

---

### VIDEO

#### Video Processing

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Channel Effects</strong></td>
<td>High pass filter, Echo canceller, Anti-feedback, Noise gate, Gate, De-esser, Compressor, 4-Band equalizer, Voice changer, Auto mixing</td>
</tr>
<tr>
<td><strong>Master Effects</strong></td>
<td>Reverb, 4-Band equalizer, Compressor/Limiter, Loudness Auto Gain Control, Adaptive Noise Reduction, Low Frequency Cut, 15-Band G-EQ, Delay</td>
</tr>
<tr>
<td><strong>Audio Processing</strong></td>
<td>Sample rate: 24 bits, 48 kHz</td>
</tr>
<tr>
<td><strong>Number of Audio Channels</strong></td>
<td>42 channels</td>
</tr>
<tr>
<td><strong>Audio Formats</strong></td>
<td>USB STREAM: input/output, Linear PCM, 24 bits, 48 kHz, 2 ch</td>
</tr>
<tr>
<td><strong>Audio Player</strong></td>
<td>File format: WAV (Linear PCM, 16 bits, 48 kHz, 4/4/48 kHz, 4/44 kHz)</td>
</tr>
<tr>
<td><strong>Video Formats</strong></td>
<td>HDMI IN 1--6: 1080/59.94p, 1080/50p, 1080/29.97p, 1080/25p, 1080/24p, 1080/23.98p, 1080/24p, 1080/23.98p, 1080/24p, 1080/23.98p</td>
</tr>
<tr>
<td><strong>Video Processing</strong></td>
<td>HDMI OUT 1--3: 1080/59.94p, 1080/50p, 1080/29.97p, 1080/25p, 1080/24p, 1080/23.98p, 1080/24p</td>
</tr>
<tr>
<td><strong>Video Output</strong></td>
<td>HDMI OUT 1--3: 1080/59.94p, 1080/50p, 1080/29.97p, 1080/25p, 1080/24p, 1080/23.98p, 1080/24p</td>
</tr>
</tbody>
</table>

---

### AUDIO

#### Audio Processing

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Level</strong></td>
<td>AUDIO IN 1-6: -64 dBu (Maximum: +24 dBu), AUDIO IN 7, 8: BR: -10 dBu (Maximum: +24 dBu), AUDIO IN 9, 10: -20 dBu (Maximum: +40 dBu)</td>
</tr>
<tr>
<td><strong>Output Level</strong></td>
<td>AUDIO OUT 1 (XLR): -44 dBu (Maximum: +24 dBu), AUDIO OUT 2 (XLR): -44 dBu (Maximum: +24 dBu)</td>
</tr>
<tr>
<td><strong>Impedance</strong></td>
<td>PHONES: 92 mW &amp; 92 mW (32 Ohms)</td>
</tr>
</tbody>
</table>

---

### CONNECTORS

#### Video Connectors

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Video Input Connectors</strong></td>
<td>HDMI IN 1--6: HDMI type A x 6, SDI IN 1--6: BNC type x 6</td>
</tr>
<tr>
<td><strong>Video Output Connectors</strong></td>
<td>HDMI OUT 1--3: HDMI type A x 3, SDI OUT 1--3: SDI type</td>
</tr>
<tr>
<td><strong>Audio Input Connectors</strong></td>
<td>Analog: AUDIO IN 1--6: Combo type (XLR, 1/4-inch TRS phone), phantom power DC 48 V (unlimited maximum), 14 mA (maximum load)</td>
</tr>
<tr>
<td><strong>Audio Output Connectors</strong></td>
<td>Digital: USB STREAM: USB type-C (B), HDMI IN 1--6: HDMI type A x 6, SDI IN 1--6: BNC type x 6</td>
</tr>
<tr>
<td><strong>Other Connectors</strong></td>
<td>TALLY/GPIO DB-25 female (Tally/GPIO, 16-pin D-Shell)</td>
</tr>
<tr>
<td><strong>Other Connectors</strong></td>
<td>TALLY/GPIO, 16-pin D-Shell (for remote control from foot switch and expression pedal)</td>
</tr>
<tr>
<td><strong>Other Connectors</strong></td>
<td>Reference IN/THRU: BNC type</td>
</tr>
</tbody>
</table>

---

### OTHERS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bluetooth</strong></td>
<td>Ver 5.0, Profile Support: A2DP (Audio), GATT (MIDI over Bluetooth Low Energy)</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>Graphic Type, 7”, Wide VGA (800 x 480 dots), backlit LCD (Color/Touch screen)</td>
</tr>
<tr>
<td><strong>Current Draw</strong></td>
<td>3.0 A</td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
<td>AC adaptor</td>
</tr>
<tr>
<td><strong>Power Consumption</strong></td>
<td>60 W</td>
</tr>
<tr>
<td><strong>Operation Temperature</strong></td>
<td>-10 to +40 degrees Celsius</td>
</tr>
<tr>
<td><strong>Operation Humidity</strong></td>
<td>30 to 90% (non-condensing)</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>437 (W) x 304 (H) x 124 (D) mm, 17.2 (W) x 12.0 (H) x 4.9 (D) inches</td>
</tr>
<tr>
<td><strong>Weight (incl. AC adaptor)</strong></td>
<td>5.3 kg, 11.7 lbs</td>
</tr>
</tbody>
</table>

---

### ACCESSORIES

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Start-up</strong></td>
<td>Hootsuite: “LEAVING THE UNIT SAFELY”, AC adaptor</td>
</tr>
<tr>
<td><strong>Power cord</strong></td>
<td>Rack-mount angle x 2, Rack-mount angle mounting screw x 6</td>
</tr>
<tr>
<td><strong>Options</strong></td>
<td>For Live Streaming and Remote Control</td>
</tr>
</tbody>
</table>

*All specifications and appearances are subject to change.*
Portable all-in-one hub for business livestreaming

- Ultra-compact audio/video mixer with direct streaming encoders
- 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 1080p HDMI inputs with frame rate converters and real-time scalers
- Support for cinema and broadcast frame rates
- Five-layer video effects engine
- Six selectable output modes: Program, Sub-Program, Aux, Preview, Multi-View, and Still-View
- 28-channel digital audio mixer with advanced effects and processing
- 16-slot still store function supports screen capture or uploaded BMP, JPEG, and PNG images via 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 six trigger pads and onboard storage for 12 audio files
- Control six PTZ cameras
- 4.3-inch touch screen with graphical menu
- Extensive device control with Bluetooth®, USB, RS-232, and LAN
Ultra-compact and filled with innovative Roland AV technologies, the VR-6HD is the ultimate all-in-one solution for everyday business livestreaming events. Offering advanced features and versatile connectivity in a portable, go-everywhere format, the VR-6HD is ideal for corporate meetings, online sales presentations, worship services, and other professional streaming and video capture applications.

**Powerful mixing tools**
Set up direct control for your most important sound feeds with seven 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.

**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, 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-6HD’s effects engine features five composition layers that can be assigned to the Program, Sub-Program, and Aux outs, so you’ll always keep audiences engaged. With up to two picture-in-picture windows and one downstream key layer with transparent PNG and external key support, you can manage any creative need.

**SDXC card recording**
With the 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.

**MULTI-CHANNEL AUDIO INPUTS AND BLUETOOTH**
The VR-6HD offers professional analog audio connectivity with six balanced XLR/TRS combination jacks, high-quality mic preamps, and phantom power. Stereo RCA inputs are available for audio players, electronic instruments, and other line-level devices, and you can mix the embedded digital audio from sources connected to the HDMI and USB inputs. And with onboard Bluetooth, it’s easy to stream wireless audio from any mobile device.
Shape your sound

The VR-6HD combines the full power of the latest digital audio consoles with expansive Roland effects. Four-band EQs and dynamics processing are 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.

Sequencing magic / automated switching and mixing

The VR-6HD’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.

When there are many presenters, you need to follow the action and switch audio and video together. The automated video switching and audio mixing features in the VR-6HD make this complicated task simple, greatly easing your workload and creating a smooth experience for the audience.
The VR-6HD puts a high-end video matrix at your fingers with three HDMI outputs, a USB-C streaming output, and an ethernet streaming output. 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.

**SPECIFICATIONS VR-6HD**

**VIDEO**

**Video Processing**
- 4:2:0 (YPbPr), 8-bit
- 4:2:2 (Y/Pb/Pr), 8-bit
- 4:4:4 (RGB/422), 8-bit
- 4:4:4 (YUV), 8-bit

**Video Input Formats**
- Video Input Formats: 8-bit
- Video Input Formats: 4:4:4 (YUV), 8-bit
- Video Input Formats: 4:2:2 (Y/Pb/Pr), 8-bit
- Video Input Formats: 4:2:0 (YPbPr), 8-bit

**Video Output Formats**
- HDMI: 2048 x 1080, 60 Hz
- HDMI: 4096 x 2160, 30 Hz
- HDMI: 2048 x 1080, 60 Hz
- HDMI: 4096 x 2160, 30 Hz

**Audio Output Formats**
- Audio Output Formats: 48 kHz
- Audio Output Formats: 48 kHz
- Audio Output Formats: 48 kHz
- Audio Output Formats: 48 kHz

**Audio Player**
- File Format: WAV
- File Format: MP3
- File Format: WMA
- File Format: AIFF

**Audio Effects**
- Channel Effects: Reverb, Band Equalizer, Compressor/Limiter, Loudness
- Channel Effects: Reverb, Band Equalizer, Compressor/Limiter, Loudness
- Channel Effects: Reverb, Band Equalizer, Compressor/Limiter, Loudness
- Channel Effects: Reverb, Band Equalizer, Compressor/Limiter, Loudness

**COMMON SECTION**

**Recording Media**
- SDHC/SDXC card (sold separately)
- USB Memory (sold separately)
- USB Flash Drive (sold separately)

**Other Functions**
- Scene Memory (32 types)
- Macro Control (100 types)
- Sequencer Control (100 types)
- Panel lock function

**AUDIO**

**Audio Processing**
- Sample rate: 24 bits, 48 kHz
- Number of Audio Channels: 28 channels

**Audio Formats**
- USB STREAM (input/output): Linear PCM, 24 bits, 48 kHz
- Audio Input: Linear PCM, 24 bits, 48 kHz

**Audio Player**
- File format: WAV
- File format: MP3

**Audio Effects**
- Channel Effects: Reverb, Band Equalizer, Compressor/Limiter, Loudness
- Channel Effects: Reverb, Band Equalizer, Compressor/Limiter, Loudness
- Channel Effects: Reverb, Band Equalizer, Compressor/Limiter, Loudness
- Channel Effects: Reverb, Band Equalizer, Compressor/Limiter, Loudness

**OTHERS**

**Bluetooth**
- Ver 5.0

**Power Supply**
- AC Adapter

**Power Consumption**
- 55 W

**Operation**
- +0 to +40 degrees Celsius
- +32 to +104 degrees Fahrenheit

**Dimensions**
- 270 W x 242 D x 100 H mm
- 14-5/8 (W) x 9-1/2 (D) x 3-15/16 (H) inches

**Weight**
- 3.4 kg, 7 lbs 8 oz

**Accessories**
- Startup Guide, LeFelt "USING THE UNIT SAFELY", AC adapter

**Options**
- Footswitch: BOSS FS-5U, FS-7, FS-7
- Expression Pedal: EV-5, EV-30, BOSS FV-500L, FV-500H

*This product is a Class A digital device under FCC part 15.*

All specifications and applications are subject to change.
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
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.

Stand out from the crowd

Chroma keying and green screens place a subject in front of a background that isn’t really there and is a high-end visual effect found in movies and used by weather people. Stand out from the crowd of live streamers to broadcast live from the beach or another planet or use chroma key technology to teach and promote your products all from the comfort of your home.

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.

Real engagement in real time

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.
Beat sync switching
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.

Audio engineer inside too
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.

Radically transform your voice
Derived from Roland’s VT series, 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... 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.

Connect to your computer, connect to your audience
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 FB Live.

RCS
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.

Video follows audio
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.

Auto scan
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.
**INPUT CONNECTORS**

- HDMI type A: 3 connectors (HDCP Supported, Multi-format Supported)
- THRU: HDMI type A (HDCP Supported)
- USB STREAM port: USB B type

**OUTPUT CONNECTORS**

- MAIN connector: HDMI type A (HDCP Supported)
- MONITOR connector: HDMI type A (HDCP Supported)
- LINE OUT jacks: RCA phono type
- PHONES jack: Stereo miniature phone type

**INPUT FORMATS**

- 4:4:4 (Y/Pb/Pr), 10-bit

**OUTPUT FORMATS**

- 480/59.94i, 576/50i, 480/59.94p, 576/50p, 720/50/50, 1080/59.94/59.94p, 576/50, VGA (640 x 480), SVGA (800 x 600), XGA (1024 x 768), HD (1280 x 720), WXGA (1280 x 800), SXGA (1280 x 1024), FWXGA (1366 x 768), SXGA+ (1400 x 1050), UXGA (1600 x 1200), FHD (1920 x 1080), WUXGA (1920 x 1200)

**VIDEO EFFECTS**

- Scene: PinP, Split
- Transition: Black fade, Mix fade
- Key Composition: Luminance key
- Other: Still Image playback, Output fade (Audio, Video: WHITE or BLACK), Test pattern output

**SPECIFICATIONS VR-1HD**

**POWER SUPPLY**

- AC Adaptor

**AUDIO BLOCK DIAGRAM**

**INPUT CONNECTORS**

- MIC IN 1--2 jacks: XLR, 1/4-inch TRS phone, phantom power (DC 48 V, 10 mA Max)
- LINE IN jacks: RCA phono type

**OUTPUT CONNECTORS**

- MAIN connector: HDMI type A
- MONITOR connector: HDMI type A
- LINE OUT jacks: RCA phono type
- PHONES jack: Stereo miniature phone type

**INPUT IMPEDANCE**

- MIC IN 1--2 jacks: 15 k ohms
- LINE IN jacks: 15 k ohms

**OUTPUT IMPEDANCE**

- PHONES jack: 92 mW + 92 mW (32 ohms)

**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

**AC ADAPTOR**

- 0 dBu = 0.775 Vrms

**AC ADAPTOR**

- 2 A

- ACCESSORIES

- Startup Guide, Leaflet "USING THE UNIT SAFELY," AC adaptor, Power cord

**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 3.0): 1 IN/1 OUT, Remote control)

**DC IN jack**

- 100 to 240 VAC, 50 to 60 Hz

- AUTO MIXING, ECHO CANCELLER, HOWLING CANCELLER, EQ, DELAY, COMPRESSOR, REVERB, LIMITER, VOICE CHANGER

- Number of Players: 4
- Data Format: WAV (Linear PCM, 48 kHz, 16 bits stereo/44.1 kHz, 16 bits stereo)

- 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.

- Sample rate: 48 kHz, 24 bits

- 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

- DC IN jack

- POWER SUPPLY

- 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
Livestream directly to multiple platforms—no computer required

- Enterprise streaming solution for direct livestreaming without a PC
- Adaptive Bitrate function reduces freezing and dropouts due to bandwidth issues
- Scene function for executing multiple tasks with a single touch
- Ease your workflow with Video Auto Switching and Auto Mixing functions
- LCD monitor for checking video I/O and delivery status in real time
- Built-in encoders for transmitting two simultaneous livestreams up to 1080p/60 FPS
- Safety Delay function to keep accidental moments from being broadcast
- Record streams directly to an SDXC card for archiving, editing, and distribution
- Play sound effects, still images, and video sources from an SDXC card to enhance your livestreams
- Three video inputs: two HDMI and one USB video class
- Two HDMI outputs: Main and Preview
- High-quality audio mixer with eight input channels for mics and line-level devices
Built for success

The SR-20HD is designed to make everyone successful with livestream operation and management, regardless of experience. It combines dual streaming encoders, simple video switching, audio mixing, and recording support in one unit, simplifying production tasks and reducing points of failure.

Plug in and stream

Using the two HDMI inputs, you can connect common video sources such as cameras, smartphones, tablets, and computers running presentation software. In addition, a wide range of audio inputs are available for mics, music players, electronic musical instruments, and more. Once everything is plugged in, simply connect to your network router and begin livestreaming with team members, clients, or students on Facebook, YouTube Live, Twitch, or by RTMP to your CDN.

The compact SR-20HD Direct Streaming AV Mixer makes it easy to produce content and encode livestreams for your business or organization—without the need for a computer. Just connect your AV devices and securely stream directly to multiple platforms over LAN. You can also record directly to SDXC media for archiving and later distribution. Everything you need is integrated into a single portable unit that anyone can use with minimal training. When consistency, dependability, and network security are top priorities, the SR-20HD delivers professional results every time.

Simplified recording and playback

The SR-20HD’s onboard recorder lets you capture H.264 MP4 video* to an SDXC card for later editing or uploading to YouTube or enterprise intranets. In addition, stereo WAV audio can be captured independently for podcasts and other audio-driven media. It’s also possible to access media stored on the SDXC card to bring higher production values to your presentations.**

*Safety delay

With the SR-20HD, you can confidently stream unscripted events and prevent offensive content from being broadcast to your audience. The Safety Delay function buffers up to 60 seconds of video and audio, allowing you to switch to a still image or mute the sound if anything goes wrong.

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

**SDXC video playback is only available when streaming in Standard mode.
Mobile phone tethering

A mobile phone with a 4G or 5G data plan can be used as the primary streaming connection or a redundant backup. Should anything happen to your main hardwired network connection, the SR-20HD will automatically switch to the tethered mobile phone over USB.

**Scenes**

With Scenes in the SR-20HD, it's easy to bring pro production values to your livestreams by executing complex switching functions all at once. Set up and store five preset arrangements of layered sources and display them in customizable inset windows. Then use the dedicated Scene buttons to switch between them and keep the audience engaged during the broadcast.

**SPECIFICATIONS SR-20HD**

<table>
<thead>
<tr>
<th>VIDEO</th>
<th>COMMON SECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Video Processing</strong></td>
<td><strong>Recording Media</strong></td>
</tr>
<tr>
<td>HDMI IN 1--2 connectors: 720/59.94p, 720/50p, 1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p</td>
<td>SDXC/SDHC card (sold separately)</td>
</tr>
<tr>
<td>5VGA (800 x 600/50Hz), XGA (1024 x 768/50Hz), WXGA (1280 x 800/60Hz), WUXGA (1366 x 768/50Hz), SXGA (1280 x 1024/60Hz), SXGA+ (1400 x 1050/60Hz), UXGA (1600 x 1200/60Hz), Full HD (1920 x 1080/60Hz), WXGAGA (1920 x 1080/60Hz)</td>
<td>* SDXC card is required for video recording. When using the SR-20HD, you must always install an SD card.</td>
</tr>
<tr>
<td>1920 x 1080 pixels (24-bit color), JPEG File (.jpg)</td>
<td></td>
</tr>
<tr>
<td>1920 x 1080 pixels, 24-bit color (alpha channel not supported), JPEG File (.jpg, jpeg)</td>
<td></td>
</tr>
<tr>
<td>300 (W) x 215 (D) x 86 (H) mm, 11-13/16 (W) x 8-1/2 (D) x 3-7/16 (H) inches</td>
<td></td>
</tr>
<tr>
<td><strong>USB Video or Audio</strong></td>
<td><strong>Other Functions</strong></td>
</tr>
<tr>
<td>USB Audio: Linear PCM 16 bit/48 kHz, stereo</td>
<td>Panel lock function, EDID emulator</td>
</tr>
<tr>
<td>You can use either USB video or USB audio <em>The USB VIDEO IN Mode can be selected at the SYSTEM menu (Video Only or Audio Only).</em></td>
<td></td>
</tr>
<tr>
<td>You can use either USB video or USB audio <em>The USB VIDEO IN Mode can be selected at the SYSTEM menu (Video Only or Audio Only).</em></td>
<td></td>
</tr>
<tr>
<td><strong>Import Still Image</strong></td>
<td><strong>Input Connectors</strong></td>
</tr>
<tr>
<td>PNG File (.png): Maximum 1920 x 1080 pixels, 24-bit color (alpha channel not supported), JPEG File (.jpg, jpeg)</td>
<td>HDMI IN 1--2 connectors: HDMI type A (Multi-format supported)</td>
</tr>
<tr>
<td>Maximum 1920 x 1080 pixels, 24-bit color</td>
<td>AUDIO IN 1--4 jacks: Combo type</td>
</tr>
<tr>
<td><strong>Audio Effects</strong></td>
<td>XLR type: balanced, phantom power (DC 48 V, 10 mA), 0 GND, 2 HOT, 3 COLOR, 1/4-inch TRS phone: balanced,</td>
</tr>
<tr>
<td>Scene: Picture in Picture, Split, Picture by Picture, Transition: Black fade, Mix fade, Key Composition: Luminance key, Chroma key</td>
<td></td>
</tr>
<tr>
<td>Audio Player</td>
<td>PHONES jack: Stereo mini-jack</td>
</tr>
<tr>
<td>Audio Codec: Linear PCM, 16 bit/48 kHz, stereo</td>
<td>HEADSET jack: Stereo mini-jack, 3.5 mm, 18-inch, TRRS 4-pole, CTIA</td>
</tr>
<tr>
<td><strong>Input Connectors</strong></td>
<td>Other Connectors</td>
</tr>
<tr>
<td>HDMI OUT MAIN, PVW connectors: HDMI type A</td>
<td>USB VIDEO IN port: USB A (USB 3.0), USB CONTROL port: USB A (USB 2.0)</td>
</tr>
<tr>
<td>LINE OUT jack: 1 k ohm</td>
<td></td>
</tr>
<tr>
<td><strong>Audio Effects</strong></td>
<td><strong>HDMI OUT MAIN, PVW connectors:</strong></td>
</tr>
<tr>
<td>Delay, High Pass Filter, Gate, Compressor, Equalizer, Limiter, Test tone output</td>
<td>1080/59.94p, 1080/50p, 1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p</td>
</tr>
<tr>
<td><strong>Audio Player</strong></td>
<td><strong>Audio CODEC</strong></td>
</tr>
<tr>
<td>File format: WAV (Linear PCM, 16 bits, 48 kHz/44.1 kHz, stereo)</td>
<td>H.264, profile High/Main/Baseline</td>
</tr>
<tr>
<td><strong>Output Connectors</strong></td>
<td><strong>Output Level</strong></td>
</tr>
<tr>
<td><strong>Audio Player</strong></td>
<td>AUDIO OUT jack: -10 dBu (Maximum Output level: +10 dBu)</td>
</tr>
<tr>
<td><strong>Power Consumption</strong></td>
<td>PHONES jack: 72 mW + 72 mW (32 ohms)</td>
</tr>
<tr>
<td>42 W</td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>AUDIO OUT jack: 1x ohm</td>
</tr>
<tr>
<td>300 (W) x 215 (D) x 86 (H) mm, 11-13/16 (W) x 8-1/2 (D) x 3-7/16 (H) inches</td>
<td></td>
</tr>
<tr>
<td><strong>Weight (incl. Accessories)</strong></td>
<td>2.4 kg, 5 lbs 5 oz</td>
</tr>
<tr>
<td><strong>USB STREAM output of the following Roland products can be used</strong></td>
<td></td>
</tr>
<tr>
<td>You must always install an SD card.</td>
<td></td>
</tr>
</tbody>
</table>

* 0 dBu = 0.775 Vrms

* This product is a Class A digital device under FCC part 15.

All specifications and appearances are subject to change.
Welcome to wireless livestreaming

- Powerful wireless production solution with hardware control surface/audio interface and full-featured iPad app
- Switch up to four wireless devices simultaneously, plus the camera on the host iPad
- Supports wireless camera connections from up to four supported iOS and Android smartphones and tablets
- Wirelessly share screens from computers and mobile devices via the Google Chrome web browser
- Switch between cameras, media, and scenes with a variety of transition effects
- Save and recall 30 scenes with titles, graphics, and picture-in-picture windows

- Media pool for integrating video, audio, photos, and graphics stored on your iPad
- Stream directly to YouTube, Facebook Live, Twitch, and custom RTMP channels over Wi-Fi or 4G/5G cellular networks
- Follow viewer comments in the AeroCaster LIVE app
- Record program output and independent camera feeds while livestreaming or offline
- Intuitive hardware control surface and audio interface with two XLR inputs, 3.5 mm stereo input, and headphones and monitor outputs and video sources stored on an SDXC card
Break free from the complicated setup and tangle of cables typically needed to connect cameras, computers, and switchers for multi-camera livestreaming. With just an iPad and a few mobile phones, the revolutionary Roland AeroCaster system will have you wirelessly switching and streaming on your favorite platform in minutes.

Easy video capture with wireless freedom
With all-wireless connectivity, you can use readily available stationary mounts to put the phones in places where it’s difficult to use a traditional camera. And with affordable gimbal mounts, you’re able to capture stabilized mobile shots from as far as your wireless network will reach.

Combine amazing visuals with great sound
The AeroCaster hardware interface handles all your audio input and output needs with the power of a small broadcast mixer. Using simple and straightforward controls, one person can manage video switching and audio mixing all at once—with no prior production experience required.

Stream with top audio quality
The AeroCaster hardware features two combo inputs for connecting XLR microphones, electronic musical instruments, or a live sound console. And with a wide range of onboard effects, your talent will always sound their best. The headphones jack supports a feed from a headset mic or the mic on your earbuds for a third vocal source, and you can bring in additional audio from a mobile device or music player via the 3.5 mm stereo input.

Wireless screen sharing with Google Chrome
AeroCaster LIVE also provides a simple solution for screen sharing from computers and mobile devices. Presenters can easily connect via the Google Chrome browser over Wi-Fi, with no cables, video adaptors, or dongles needed.
AeroCaster Live VRC-01 Block Diagram

September, 2022

Audio Block Diagram

Video Block Diagram

Music performances
Online talk shows
Live selling
## SPECIFICATIONS AEROCASTER VRC-01

### VIDEO

<table>
<thead>
<tr>
<th>Connectors</th>
<th>MONITOR OUT jack: RCA phono type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PHONES/HEADSET jack: Stereo miniature type (Stereo, CTIA-type)</td>
</tr>
<tr>
<td></td>
<td>DC IN 5V port. USB Type-C (R)</td>
</tr>
<tr>
<td></td>
<td>DEVICE port: USB Type-C (R)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Controller</th>
<th>MIC 1 LEVEL fader, MIC 2 LEVEL fader, LINE IN LEVEL fader, MAIN LEVEL fader.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MIC 1 COMP/LIMITER knob, MIC 2 COMP/LIMITER knob, MIC 1 GAIN knob,</td>
</tr>
<tr>
<td></td>
<td>MIC 2 GAIN knob, LOOP BACK knob, HEADSET/ONBOARD MIC knob,</td>
</tr>
<tr>
<td></td>
<td>REVERB knobs, LIP SYNC DELAY knob, PHONES/HEADSET knob.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator</th>
<th>POWER, DEVICE, SIG/PEAK</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Nominal Input Level</th>
<th>MIC 1, 2 jacks: -60 to +4 dBu (Maximum input level: +24 dBu)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LINE IN jacks: -10 dBu (Maximum input level: +10 dBu)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nominal Output Level</th>
<th>MONITOR OUT jacks: -10 dBu (Maximum output level: +10 dBu)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PHONES/HEADSET jack: +15 mW +15 mW (32 ohms load)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power Supply</th>
<th>USB AC adapter (commercially available)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation</td>
<td>0° to +40 degrees Celsius</td>
</tr>
<tr>
<td>Temperature</td>
<td>+32 to +104 degrees Fahrenheit</td>
</tr>
<tr>
<td>Dimensions</td>
<td>220(W) x 166(D) x 60(H) mm, 8-11/16(W) x 6-9/16(D) x 2.3/8(H) inches</td>
</tr>
<tr>
<td>Weight</td>
<td>Without cables: 600 g + 6 oz</td>
</tr>
<tr>
<td></td>
<td>Cable: 3.5 lb + 1 oz</td>
</tr>
<tr>
<td>Accessories</td>
<td>Leaflet “Read Me First”, USB Type-C to Lightning cable, USB Type-C to USB Type-A cable</td>
</tr>
</tbody>
</table>

### AUDIO PROCESSING

<table>
<thead>
<tr>
<th>Video Effects</th>
<th>Transition: CUT, MIX (DISSOLVE), Wipe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DSK (overlay): Text, Media Composition: PinF, Key (Luminance Key, Chroma Key), Simple teleop function</td>
</tr>
<tr>
<td></td>
<td>PNG alpha channel composition supported.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Audio Processing</th>
<th>Sampling Rate: 24 bits, 48 kHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streaming Platform</td>
<td>YouTube Live, Facebook Live, Twitch</td>
</tr>
<tr>
<td>Other Functions</td>
<td>[Zoom, Exposure, White Balance, Focus, LED Light, Stabilization]</td>
</tr>
<tr>
<td></td>
<td>Depends on smart phone or tablet</td>
</tr>
</tbody>
</table>

### OPERATING CONDITIONS

<table>
<thead>
<tr>
<th>AeroCaster LIVE</th>
<th>Operating System: iOS 14 or later</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CPU: Apple A12 processor or better (A12Z or better is recommended)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AeroCaster Camera (for iPhone, iPad)</th>
<th>Operating System: iOS 13 or later</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU: Apple A10 processor or better (iPhone 7 or higher recommended)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AeroCaster Camera (for Android)</th>
<th>Operating System: Android 10 or later</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU: Models with H.264 hardware encoder</td>
<td></td>
</tr>
<tr>
<td>Others: Screen resolution 1280x720 or higher</td>
<td></td>
</tr>
<tr>
<td>Equipped with two or more cameras in front and rear</td>
<td></td>
</tr>
</tbody>
</table>

* 0 dBu = 0.775 Vrms  
* This product is a Class A digital device under FCC part 15.
AeroCaster Switcher

Wireless video and media expansion for your Roland switcher

- Use your iPad to expand your Roland hardware with up to five simultaneous video sources
- Wirelessly share screens from computers and mobile devices via the Google Chrome web browser
- Switch between cameras and scenes with a variety of transition effects
- Use the camera on the host iPad as a fifth video source
- Supports wireless camera connections from up to four supported iOS and Android smartphones and tablets
- Supports video resolution up to 1080p at 30 FPS over Wi-Fi
- Save and recall 30 scenes with titles, graphics, or picture-in-picture windows
- Media pool for integrating videos, photos, and graphics from your iPad library
AeroCaster Switcher is a free iPad app that expands the production power of supported Roland A/V hardware with cable-free video connectivity over a wireless network. Connect your iPad to an HDMI input and switch wireless camera feeds from iOS and Android smartphones and tablets, as well as screen shares from computers and mobile devices. Use images from up to four wireless devices simultaneously, plus the camera on the host iPad. Roland’s advanced video technology is also included in the app, allowing you to add graphics, titles, video clips, photos, effects, and more to your feed.

Enhance your productions with the cameras everyone carries
AeroCaster Switcher lets you take advantage of the high-quality cameras in today’s smartphones and tablets and make anyone in the production crew a camera operator. Cut to unique handheld angles or use widely available mobile device mounts to grab up-close captures of hands-on presentations. The possibilities are endless!

Quick and easy set up
Simply download the AeroCaster Camera app* on each smartphone or tablet you want to use, connect them to the AeroCaster Switcher app over the local Wi-Fi network, and place the camera for the perfect shot. You have complete control of the available camera functions on each device from the iPad, including focus, zoom, exposure, stabilization, white balance, and more.

What you need to get started
To get started with the AeroCaster you need to have a supported Roland video switcher or A/V streaming mixer, a supported Apple iPad with the AeroCaster Switcher app installed and a supported smartphone or tablet with the AeroCaster Camera app installed. You will also need to have the official Apple HDMI adaptor for your iPad model. A fast and stable Wi-Fi network connection is also required for best results.

Screen sharing made simple
AeroCaster Switcher also provides a simple BYOD solution for wireless HD screen sharing. Presenters and panelists can connect via the Google Chrome browser on their computers and mobile devices. Screen sharing is fast and easy with an internet connection and Wi-Fi, with no cables, video adaptors, or dongles required.

You can activate AeroCaster Switcher with one of the following Roland products:
VR-400UHD, VR-120HD, VR-50HD MK II, VR-6HD, VR-4HD, VR-1HD, V-160HD, V-02HD MK II, V-4EX,
UVC-01, UVC-02, VC-100UHD
Scenes and visual effects

AeroCaster Switcher includes powerful production tools to manage your wireless sources independently from your Roland switcher. Via an intuitive interface, you can create up to 30 scene presets with text overlays, graphics (including transparent PNG files), picture-in-picture windows, or split-screen views. During an event, it’s easy to select scenes, camera sources, or media content. A selection of cuts, cross-dissolves, and wipes are also on hand for smooth transitions.

Add local content

AeroCaster Switcher also gives you the ability to bring video clips, photos, and graphics into your productions. It’s simple to add media from your iPad library—tap the plus icon in the AeroCaster media pool, select the desired media, and tap again to show it live.

SPECIFICATIONS AEROCASTER SWITCHER

<table>
<thead>
<tr>
<th>VIDEO</th>
<th>OPERATING CONDITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Video Input</strong></td>
<td>Satellite camera, Browser source, Built-in camera (iPad).</td>
</tr>
<tr>
<td>* 5 inputs in total</td>
<td></td>
</tr>
<tr>
<td>* Satellite cameras can be used with AeroCaster Camera or Web browser.</td>
<td></td>
</tr>
<tr>
<td>* Need to install the &quot;AeroCaster Camera&quot; App on your iPhone.</td>
<td></td>
</tr>
<tr>
<td>* &quot;Browser source&quot; use PC or mobile devices (iOS, Android OS) via Google Chrome web browser.</td>
<td></td>
</tr>
<tr>
<td>* Codec: H.264 Bitrate: Up to 20Mbps</td>
<td></td>
</tr>
<tr>
<td><strong>Video Processing</strong></td>
<td>RGB 4:4:4, 8-bit, 1080/60p</td>
</tr>
<tr>
<td>* Depends on iPad internal processing</td>
<td></td>
</tr>
<tr>
<td>* Video input will be converted automatically.</td>
<td></td>
</tr>
<tr>
<td><strong>Input Formats</strong></td>
<td>Up to 1080/30p</td>
</tr>
<tr>
<td>* Automatically adjusts resolution and frame rate according to network bandwidth.</td>
<td></td>
</tr>
<tr>
<td><strong>Output Formats</strong></td>
<td>Up to 1080/60p</td>
</tr>
<tr>
<td>* Recommend Apple USB-C Digital AV Multiport Adapter or Apple Lightning-Digital AV Adapter.</td>
<td></td>
</tr>
<tr>
<td><strong>Still image and video playback</strong></td>
<td>Up to 100</td>
</tr>
<tr>
<td>* Use still images and videos saved in the iPad.</td>
<td></td>
</tr>
<tr>
<td>* File format conforms to iOS Photo Library.</td>
<td></td>
</tr>
<tr>
<td>* PNG alpha channel supported</td>
<td></td>
</tr>
<tr>
<td><strong>Scene</strong></td>
<td>Up to 30</td>
</tr>
<tr>
<td>* Text, Media (Overlay), PinP, SPLIT, QUAD are either can be registered.</td>
<td></td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td>Incompatible</td>
</tr>
<tr>
<td><strong>Other Functions</strong></td>
<td>Satellite camera control (Zoom, Exposure, White Balance, Focus, LED Light, Stabilization) * Depends on the iPhone or iPad used</td>
</tr>
</tbody>
</table>

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.
Plug-and-play for flawless recordings and livestreams

- High-quality HDMI to USB 3.0 video encoder
- Plug-and-play USB webcam operation for Mac and Windows computers
- Seamlessly works with all Roland V-series switchers with an HDMI output
- Also works with most HDMI-equipped cameras and camcorders
- Uncompressed 1080p HD at 60 FPS for engaging livestreams
- Dedicated analog audio line input for live music versatility
- Powered via USB

For online content creators, musicians, and gamers to businesses, schools, and houses of worship, livestreaming is an essential medium for communicating with people around the world. With the UVC-01, it’s never been easier to add high-quality livestreaming capabilities to your Roland V-series video switcher or favorite HDMI-equipped camera or camcorder. Just connect to the UVC-01 via HDMI, plug into your computer’s USB 3.0 port, and start streaming to Facebook Live, YouTube, and other popular platforms. Offering plug-and-play operation in a rugged, pocket-size design, the UVC-01 is ready for action everywhere you go.

SPECIFICATIONS UVC-01

<table>
<thead>
<tr>
<th>VIDEO</th>
<th>AUDIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Connectors</td>
<td>HDMI IN connector: HDMI type A * Multi-format Supported * HDCP Not Supported</td>
</tr>
<tr>
<td>Output Connectors</td>
<td>USB STREAM port: USB 3.0 B type</td>
</tr>
<tr>
<td>Input Formats</td>
<td>480i/59.94, 576/60, 480/59.94p, 576/50, 720/59.94p, 720/50, 1080/59.94, 1080/50, 1080/59.94i, 1080/50i, VGA (640 x 480/60 Hz), SVGA (800 x 600/60 Hz), XGA (1024 x 768/60 Hz), HD (1280 x 720/50 Hz), WXGA (1280 x 800/60 Hz), SXGA (1280 x 1024/60 Hz), HD (1920 x 1080/60 Hz) * The refresh rate is the maximum value of each resolution. * Conforms to VESA DMT Version 1.0 Revision 11.</td>
</tr>
<tr>
<td>USB Video Output Format</td>
<td>YUY2 (Uncompressed)</td>
</tr>
<tr>
<td>USB Video Output Resolution</td>
<td>1920 x 1200, 1920 x 1080, 1680 x 1050, 1600 x 1200, 1600 x 900, 1440 x 900, 1366 x 768, 1280 x 720, 1280 x 1024, 1080 x 960, 1280 x 850, 1280 x 720, 1280 x 800, 1280 x 720, 1024 x 768, 1024 x 576, 1024 x 768, 960 x 540, 856 x 480, 800 x 600, 768 x 576, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240 * The maximum frame rate is 60 fps.</td>
</tr>
</tbody>
</table>

Audio formats
- HDMI IN connector: Linear PCM, 48 kHz / 44.1 kHz, 24 bits / 20 bits / 16 bits, stereo
- USB STREAM port: Linear PCM, 48 kHz, 16 bits, stereo

<table>
<thead>
<tr>
<th>OTHERS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Supply</td>
<td>Supplied from the computer via USB</td>
</tr>
<tr>
<td>Current Draw</td>
<td>500 mA</td>
</tr>
<tr>
<td>Operation Temperature</td>
<td>0 to +40 degrees Celsius, -32 to +104 degrees Fahrenheit</td>
</tr>
<tr>
<td>Dimensions</td>
<td>50 (W) x 37 (D) x 23 (H) mm</td>
</tr>
<tr>
<td>Weight (excluding AC adapter)</td>
<td>96 g, 4 oz</td>
</tr>
<tr>
<td>Accessories</td>
<td>Owner’s Manual, USB 3.0 Cable</td>
</tr>
</tbody>
</table>

* 0 dBu=0.775 Vrms
Look and sound your best in video meetings and presentations

- Convenient and affordable desktop docking station to upgrade your business streaming with pro-level audio and video
- Inputs for a DSLR or other high-quality camera, an XLR microphone, and stereo audio sources
- HDMI video input supports embedded sound and features automatic scaling for different video resolutions
- Studio-grade sound with Roland’s acclaimed digital audio technology
- Plug and play operation—automatically appears as a webcam and audio source in your favorite streaming software
- Enhance your streams with professional audio processing, sound effects, and the unique Voice Change effect
- Hands-on control of volume levels plus audio and video muting
- Assignable buttons for customizable control, configurable with free UVC-02 software for macOS and Windows
Present with confidence

The UVC-02 is a compact broadcast control center that fits comfortably on your desktop. It allows you to connect a high-quality HDMI camera, pro microphone, and other audio sources and send them directly to meeting and streaming platforms on your computer via a single USB cable. And with an array of hands-on knobs and switches at your fingertips, you can easily control the action without ever touching your mouse or computer keyboard.

Plug in and play

Once connected to your computer via USB, the UVC-02 is instantly recognized as a webcam and audio source, with no drivers or setup required. That means it’s ready to go with popular web meeting software such as Zoom, Microsoft Teams, Webex by Cisco, or any application that uses a webcam as an A/V source for streaming or recording.

Love the sound of your voice

Just like a broadcast studio, the UVC-02 includes a pro-quality equalizer and audio effects to make your voice sound great. Convenient templates are included to get you started, complete with easy controls to tweak the sound until it’s just right.

The ultimate webcam upgrade

Connect just about any HDMI-compatible camera and instantly elevate the image quality over your built-in or USB webcam. Many standalone cameras offer HDMI output, from action and point-and-shoot cameras to higher-grade mirrorless and DSLR models. They have much better lenses than any webcam and often include zoom capability to frame your perfect shot.
Get ready to sound great

There’s nothing worse than bad audio quality in an online meeting. The UVC-02 ensures your sound starts off strong and stays that way. With a tiny studio-grade mixer and four inputs backed by Roland’s pro audio technology, you have a whole new range of sonic superpowers at your command.

Works with professional mics

Pro broadcast and recording studios choose a specific microphone to get the best out of a performer’s voice. Now, you can choose the mic type that’s right for you and connect it via the XLR input on the UVC-02. Phantom power is also available, allowing you to use a studio-grade condenser mic for the very best sound quality.

Sound monitoring made simple

The UVC-02 has a dedicated headphones jack, as well as a stereo monitor output for connecting to external speakers or a recorder. And both have dedicated panel knobs that allow you to reach out and control the listening level with a quick twist. The headphones jack also supports the inline mic on a standard set of earbuds, and there’s a dedicated level knob for this as well.

One-touch audio mute

Don’t scramble for the un-mute switch in your software as everyone chants, “You’re on mute.” Just press the large Talk button to instantly turn your audio on or off. And with the button’s bright backlight, you’ll always know when your sound is live.

Customizable control

Streamline your sessions even further with dedicated UVC-02 software for macOS and Windows. Choose two functions that you use most often—such as PowerPoint slide advance* or a sound effect trigger—and assign them to the A1 and A2 buttons for one-touch operation.
**SPECIFICATIONS UVC-02**

**VIDEO**

<table>
<thead>
<tr>
<th>Input Connectors</th>
<th>HDMI IN: HDMI Type A</th>
</tr>
</thead>
<tbody>
<tr>
<td>* HDCP not Supported</td>
<td></td>
</tr>
<tr>
<td>* Multi-format Supported</td>
<td></td>
</tr>
</tbody>
</table>

| Input Formats | 480/59.94i, 576/50i, 720/59.94i, 720/50i, 1080/29.97p, 1080/25p, 1080/59.94p, 1080/50p, 1080/60i, 720/50i, 720/60p |

<table>
<thead>
<tr>
<th>Input Connectors</th>
<th>USB STREAM</th>
<th>USB 3.0 Type-B</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>USB Video Output Format</th>
<th>YUY2 (Uncompressed), Motion JPEG (Compressed)</th>
</tr>
</thead>
</table>

**Audio Processing**  
Sample Rate: 48 kHz, 24 bits

**Audio Connectors**

- MIC: XLR type (Balanced, Phantom power DC 48V, 14 mA Max)
- HEADSET: Stereo miniature phone type (CTIA, PLUG-IN power)
- AUX IN: Stereo miniature phone type

**Digital Connectors**

- HDMI IN: HDMI Type A
- USB STREAM: USB 3.0 Type-B

**Nominal Input Level**

- MIC IN: -54 dBu to -14 dBu (Maximum input level: +4 dBu)
- HEADSET: -20 dBu (Maximum input level: -2 dBu)
- AUX IN: -10 dBu (Maximum input level: +8 dBu)

**Digital Audio Format**

- HDMI IN: Linear PCM, 48 kHz / 44.1 kHz, 24 / 20 / 16 bits
- USB STREAM: Linear PCM, 48 kHz, 16 bits, Stereo

**Audio Effects**

- Anti-Feedback, Echo Canceller, Ducker, Voice Changer, Reverb, Noise Suppressor, Equalizer, Expander, Compressor, Delay

**Audio File Player**

- Number of Tracks: 2
- Data Formats: WAV (Linear PCM, 48 kHz, 16 bits, stereo / mono)
- Maximum Time: 5 seconds / track

**COMMON**

**Other Functions**

- MIC Mute (TALK button), Audio Mute (AUDIO OUT button)
- Video Off (VIDEO OUT button), Slideshow Control

**Power Supply**

- 900 mA (4.5 W)

**Current Draw**

- 4.5 W

**Operation Temperature**

- +0 °C to +40 °C (32 °F to +104 °F)

**Dimensions**

- 124 (W) x 117 (D) x 52 (H) mm

**Weight**

- 460 g, 1 lb 0.3 oz (excluding AC adapter)

**Accessories**

- Leaflet "Read Me First", USB 3.0 Cable

* 0 dBu=0.775 V rms
A versatile and compact switcher with multi-screen output and video compositing

- A table-top matrix switcher, with a similar width to a 13” laptop, equipped with four HDMI inputs and outputs
- High-quality 10-bit 4:4:4 processing
- Frame synchronizer and scaler on all inputs
- Still images can be loaded from a USB flash drive
- Three operation modes
- Matrix Mode allows switching of 4 sources to any of 4 outputs

- Switcher Mode allows PinP, key-compositing, and dissolve transitions
- Split Mode allows PinP of up to three inset windows
- Built-in eight-channel digital audio mixer handles audio from four HDMI signals and stereo analog input
- Built-in EDID emulator, and HDCP-compliant
**VIDEO BLOCK DIAGRAM**

**AUDIO BLOCK DIAGRAM**

**SPECIFICATIONS XS-1HD**

### VIDEO

- **Processing**: 4:4:4 (Y/Pb/Pr, RGB), 10 bits / 4:2:2 (Y/Pb/Pr), 10 bits
- **Input Connectors**: HDMI: HDMI type A x 4 (HDMI INPUT 1--4) *HDCP Supported
- **Output Connectors**: HDMI: HDMI type A x 4 (HDMI OUTPUT 1--4) *HDCP Supported
- **Formats**: 480/59.94i (*1), 576/50i (*1), 480/59.94p (*1), 576/50p (*1), 720/59.94p, 720/50p, 1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p, 800×600/60 (*1), 1024×768/60 (*2), 1280×720/60 (*2), 1280×800/60 (*2), 1366×768/60 (*2), 1280×1024/60 (*2), 1400×1050/60 (*2), 1600×1200/60, 1920×1080/60, 1920×1200/60
- **Effects**: Output Mode Switcher, Split, Matrix
- **Composition (Keyer)**: 1 (*3)
- **Others**: HDCP Supported, Test Pattern Generator

### AUDIO

- **Processing**: 4x48 kHz
- **Input Connectors**: HDMI: HDMI type A x 4
- **Output Connectors**: HDMI: HDMI type A x 4
- **Output Level**: AUDIO OUT –10dBu (Maximum: +8dBu)
- **Output Impedance**: AUDIO OUT 1kΩ, PHONES 10Ω
- **Formats**: HDMI: Linear PCM, 24 bits, 48kHz, 2 ch
- **Others**: Mixer 4 ch (Delay: Maximum 500 ms, Audio Follow)

### OTHERS

- **External Connectors**: REMOTE RS-232 DB-9 type (Male) x 1, USB MEMORY USB A type x 1
- **Preset Memory**: 16 *Auto Memory Function
- **Power Supply**: AC Adaptor
- **Current Draw**: 2.1A
- **Power Consumption**: 25W
- **Dimensions**: 328 (W) x 117 (D) x 57 (H) mm
- **Weight**: 1.2kg
- **Accessories**: Owner’s Manual, AC adapter, Power cord

---

(*) Input only.

(*) Output refresh rate is 75 Hz when frame rate is set to 50 Hz.

(*3) These effects depend on Output Mode.
XS-42H

Meet. Share. Repeat.

- Switch up to 4 HDMI inputs to 1 or 2 displays
- Content displays automatically with Auto Input Detection
- Run and switch the meeting from a web browser on a tablet, phone or PC (connected to same network)
- Automatic switching of audio along with video
- Arrange meeting presets for recalling common meeting set-ups with the push of a button
**SPECIFICATIONS XS-42H**

**VIDEO**
- Processing: 4:4:4 Y/Pb/Pr, RGB/10 bits, 4:2:2 (Y/Pb/Pr)/10 bits
- Input Connectors: HDMI: HDMI type A x 4 (HDMI INPUT 1-4), * HDCP Supported
- Output Connectors: HDMI: HDMI type A x 2 (HDMI OUTPUT 1-2), * HDCP Supported
- Formats:
  - 480/59.94 (*), 576/50 (*), 480/59.94p (*), 576/50p (*), 720/59.94p, 720/50p, 1080/59.94, 1080/50, 1080/59.94p, 1080/50p, 800 x 600/60 (1), 1024 x 768/60 (2), 1280 x 720/60 (2), 1280 x 800/60 (*2), 1366 x 768/60 (2), 1600 x 1200/60 (2), 1920 x 1080/60, 1920 x 1200/60 RB (*2), 1366 x 768/60 (*2), 1280 x 1024/60 (*2), 1400 x 1050/60 (*2), 1600 x 900 x 600/60 (*1), 1024 x 768/60 (*2), 1280 x 720/60 (*2), 1280 x 800/60 (*1), 720/59.94p, 1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p, 480/59.94i (*1), 576/50i (*1), 480/59.94p (*1), 576/50p (*1), 720/59.94p, 720/50p
- Composition: Layer: 1
- Transition: Black-insert, Mix, Cut
- Still Image:
  - Internal Memory: 1
  - Maximum Size: 1920 x 1200 pixels
  - Format: Windows Bitmap File (.bmp) 24 bit per pixel, uncompressed

* 0 dBu=0.775 Vrms

**AUDIO**
- Sample Rate: 48 kHz, 24 bits
- Input Connectors: HDMI: HDMI type A x 4, AUDIO INPUT: RCA pin type
- Output Connectors: HDMI: HDMI type A x 2, AUDIO OUTPUT: RCA pin type
- Input Level: AUDIO INPUT: -10 dBu (Maximum: +8 dBu)
- Input Impedance: AUDIO INPUT: 15 k ohms
- Output Level: AUDIO OUTPUT: -10 dBu (Maximum: +8 dBu)
- Output Impedance: AUDIO OUTPUT: 1 k ohm
- Formats: HDMI: Linear PCM, 24 bits, 48 kHz, 2 ch
- Processing: Mixer: 4 ch x 2 (Delay: Maximum 250 ms, Audio Follow)

**OTHERS**
- External Connectors:
  - REMOTE: IR: 232: DB-9 type (Male) x 1
  - LAN: 8/35: x 1
  - USB: USB A type x 1 (Use for future expansion)
  - USB MEMORY: USB A type x 1 (Use for USB Memory)
- Functions:
  - Scene Memory: 10
  - Test Pattern Generator
  - Test Time Generator
  - EDID Emulator
- Power Supply: AC Adaptor
- Current Draw: 2.1 A
- Power Consumption: 25 W
- Operation Temperature: + 0 to + 40 degrees Celsius, + 32 to + 104 degrees Fahrenheit
- Dimensions: 242 (W) x 125 (D) x 44 (H) mm
- Weight: 1.2 kg, 2 lbs 11 oz
- Accessories:
  - Owner’s Manual, Leaflet “USING THE UNIT SAFELY”, AC adaptor, Power cord, Rubber feet (4 pcs.), Rack mount angle set

---

**INPUT 1**
- STILL IMAGE BLACK
- FRAME SYNCHRONIZER COLOR CORRECTOR
- SCALER
- HDMI IN
- HDMI
- INPUT 1
- STILL IMAGE BLACK
- FRAME SYNCHRONIZER COLOR CORRECTOR
- SCALER
- HDMI IN 1
- HDMI
- OUTPUT 1

**INPUT 2**
- STILL IMAGE BLACK
- FRAME SYNCHRONIZER COLOR CORRECTOR
- SCALER
- HDMI IN
- HDMI
- INPUT 2
- STILL IMAGE BLACK
- FRAME SYNCHRONIZER COLOR CORRECTOR
- SCALER
- HDMI IN 2
- HDMI
- OUTPUT 2

**INPUT 3**
- STILL IMAGE BLACK
- FRAME SYNCHRONIZER COLOR CORRECTOR
- SCALER
- HDMI IN
- HDMI
- INPUT 3
- STILL IMAGE BLACK
- FRAME SYNCHRONIZER COLOR CORRECTOR
- SCALER
- HDMI IN 3
- HDMI
- OUTPUT 3

**INPUT 4**
- STILL IMAGE BLACK
- FRAME SYNCHRONIZER COLOR CORRECTOR
- SCALER
- HDMI IN
- HDMI
- INPUT 4
- STILL IMAGE BLACK
- FRAME SYNCHRONIZER COLOR CORRECTOR
- SCALER
- HDMI IN 4
- HDMI
- OUTPUT 4

**INPUT BLACK**
- STILL IMAGE BLACK
- FRAME SYNCHRONIZER COLOR CORRECTOR
- SCALER
- HDMI IN
- HDMI
- INPUT BLACK
- STILL IMAGE BLACK
- FRAME SYNCHRONIZER COLOR CORRECTOR
- SCALER
- HDMI IN BLACK
- HDMI
- OUTPUT BLACK

**EXTERNAL CONNECTORS**
- HDMI: HDMI type A x 4 (HDMI INPUT 1-4), * HDCP Supported
- AUDIO INPUT: RCA pin type
- 4:4:4 (Y/Pb/Pr, RGB)/10 bits, 4:2:2 (Y/Pb/Pr)/10 bits
- 48 kHz, 24 bits
- HDMI: HDMI type A x 2, AUDIO OUTPUT: RCA pin type
- 4:4:4 (Y/Pb/Pr, RGB)/10 bits, 4:2:2 (Y/Pb/Pr)/10 bits
- 48 kHz, 24 bits

**OUTPUT CONNECTORS**
- HDMI: HDMI type A x 2 (HDMI OUTPUT 1-2), * HDCP Supported
- AUDIO OUTPUT: 1 k ohm
- AUDIO OUTPUT: 1 k ohm

**Input Select**
- L: 1 kHz
- R: 2 kHz
- -10 dBu

**Output Select**
- L: 1 kHz
- R: 2 kHz
- -10 dBu
XS-62S HD VIDEO SWITCHER

Rackmount switcher for live production and fixed installations with PTZ camera control

- 4 SDI inputs (with de-interlacer)
- 2 HDMI inputs (scaled)
- RGB/COMPONENT/COMPOSITE input (scaled)
  – shared with HDMI input 6
- 2 SDI outputs – assignable to PGM, PVW, AUX
- 2 HDMI outputs – assignable to PGM, PVW, AUX
- 1 HDMI output (scaled / multi-view) – multi-view or scaled output
- TALLY/GPIO
- RS-232 – remote control
- RS-422 – PTZ control (VISCA)
- LAN – remote control and Smart Tally (PTZ Control (VISCA))

Video switcher, converter, audio mixer – all in one product
The XS-62S is a compact 1U rack mount, compact 6-channel video switcher with audio mixer and PTZ camera control capabilities for both permanent installs and on-site events. This powerful, integrated solution supports a wide range of applications including presentation and performance and special event venues, corporate AV conferences, classrooms for e-learning and more.

**Live production studio**

The XS-62S makes it easy to create content with an all-in-one switching and audio mixing system that streamlines the production process. The XS-62S is easy to use from either the front panel controls or remote control software from a PC or Mac. Programmable presets allow one-touch recall of preset camera positions and angles, and the audio auto mixer takes care of audio mixing in the background, so the operator can focus on switching video.

**Performance venue / church**

XS-62S is the ideal solution for hotel meeting rooms and banquet halls, houses of worship and live performance venues. The XS-62S Matrix Mode makes it easy to send different content to 2 to 3 screen destinations, from a single switcher all while mixing program audio and controlling PTZ remote cameras.

**Live streaming and video conference**

The XS-62S is also suitable for live streaming and web conferencing systems. In this type of application, you could be using multiple PTZ cameras and PCs. With the XS-62S this can easily be operated by a small team or even a single person. PTZ camera control eliminates the need for individual camera operators, since everything can be controlled from the XS-62S while video is being switched by the same operator.

**Multi PTZ & remote camera control**

When LAN based PTZ cameras are called into action, take control using the XS-62S or powerful RCS. Seamlessly integrate JVC, Panasonic, Sony, PTZOptics, Avonic and VISCA compatible professional pan-tilt-zoom (PTZ) robotic cameras to streamline workflow without the need for a dedicated controller. For a gaming-like experience, pick up a USB gamepad and conquer a team of PTZ cameras. The RCS can connect to certain Canon handheld camcorders via LAN connection. Start & stop recording and tally light is supported.
Preset Memory (8 types), Panel Lock Function, EDID Emulator, Smart Tally

**SPECIFICATIONS**

**VIDEO**

**Processing**
- 4:2:2 (YPrPb), 8-bit

**Input Connectors**
- SDI IN 1-4: BNC type x 4
- HDMI IN 5-6: HDMI type A x 2
  * Conforms to SMPTE 243M (SDI), SMPTE 259M (HDMI)
- * Multi-format supported
- * Select either HDMI or BNC/COMPONENT or COMPOSITE for the INPUT 6 connectors

**Output Connectors**
- SDI OUT 1-2: BNC type x 2
- HDMI OUT 1-3: HDMI type A x 3
- * Multi-format supported

**Analog Input Level, Impedance**
- RGB: 0.7Vp-p, 75ohms (H: VS/VT, L: VCs/VCs)
- COMPONENT: 1.0Vp-p, 75ohms (H: Y, L: C tendencies, CENTER: Y, C, PALL, 75ohms)
- COMPOSITE: 1.0Vp-p (Y), 0.286Vp-p (C: NTSC, CENTER: Y, PALL, 75ohms)

**Input formats**
- SDI IN 1-4 connectors (Conforms to SMPTE 293M, SMPTE 274M)
  - SYSTEM FORMAT = 720p: 720/59.94p, 720/50p
  - SYSTEM FORMAT = 1080i: 1080/59.94i, 1080/50i
- SDI IN 1-4 connectors (Conforms to SMPTE 292M, SMPTE 424M (SMPTE 425M-AB), 292M)
  - HDMI IN, HDMI OUT: 1080/59.94i, 1080/50i (SYSTEM FORMAT = 1080i)
  - HDMI IN, HDMI OUT: 1080/29.97i, 1080/25i
  - HDMI IN, HDMI OUT: 1080/23.98i, 1080/24i
- HDMI IN, HDMI OUT: 1080/59.94p, 1080/50p
- HDMI IN, HDMI OUT: 1080/59.94p, 1080/50p

**Output formats**
- HDMI OUT: 1080/59.94i, 1080/50i
- HDMI OUT: 1080/29.97i, 1080/25i
- HDMI OUT: 1080/23.98i, 1080/24i
- HDMI OUT: 1080/59.94p, 1080/50p
- SDI OUT 1-2: BNC type x 2
- HDMI OUT 1-3: HDMI type A x 3
- * Multi-format supported

**Audio**

**Audio Processing**
- Sampling rate: 24-bit/48kHz

**Audio formats**
- SDI IN, Linear PCM: 24 bits/48kHz, 2 ch (Conforms to SMPTE 293M)
- HDMI IN, HDMI OUT: Linear PCM, 24 bits/48kHz, 2 ch (Conforms to SMPTE 293M)

**Input Connectors**
- SDI IN 1-4: BNC type x 4
  * 1080/59.94i, 1080/50i
  * 1080/59.94p, 1080/50p
  * 1080/29.97i, 1080/25i
  * 1080/23.98i, 1080/24i
- HDMI IN, HDMI OUT: 1080/59.94i, 1080/50i
- HDMI IN, HDMI OUT: 1080/29.97i, 1080/25i
- HDMI IN, HDMI OUT: 1080/23.98i, 1080/24i
- * Multi-format supported

**Others**

**USB Memory**
- Port: (for USB flash drive)
- USB type: A-A (low speed)

**Display**
- Type: LCD 128 x 64 dots

**Power Supply**
- AC Adaptor

**Current Draw**
- 2.6 A

**Power Consumption**
- 31.0 W

**Operating Temp.**
- 0°C to +40°C

**Dimensions**
- 481 (W) x 333 (D) x 44 (H) mm, 118-15/16 (W) x 13-1/8 (D) x 1-3/4 (H) inches

**Accessories**
- Owner’s Manual, AC Adaptor, Power cord, Rubber Foot x 4

---

**PDM / PST mode**

PDM/PST Mode operates as a traditional video switcher complete with multiple compositions that enable groupings of multiple images on one screen. You can create compositions by combining DSK for layering titles and graphics as well PinP inset of video. Compositions can be previewed before sending to Program on the Preview output and can be sent to Program by pressing the TAKE button.

**DISSOLVE mode**

Video switching and composition with cross dissolve to the PGM bus are possible in Dissolve Mode. Dissolve Mode is easily operated from the front panel and is suitable for a system where the user directly operates the main unit in a meeting space or event. The AUX bus is also available in Dissolve Mode, making it possible to output different video from the PGM bus and PST bus.

**MATRIX mode**

Individual video input signals can be output to three different destinations on three buses. This mode is effective for routing signals and is ideal for events and using multiple screens. Switching the video is with black frame.

**Other Connectors**
- USB MEMORY port (for USB flash drive)
- JACK 3.5mm (L/R)
- RCA phono type (L/R)
- * Multi-format supported

**Audio Connectors**
- Audio Input: RCA phono type
- * Multi-format supported

**Control**
- RS-232C: 9-pin (male, for RS-232D)
- RS-422: 9-pin (female, for RS-422A)
- RS-422: 9-pin (male, for RS-422A)
- TALLY/GPIO: 9-pin (female)

**Power Consumption**
- 31.0 W

**Dimensions**
- 481 (W) x 333 (D) x 44 (H) mm, 118-15/16 (W) x 13-1/8 (D) x 1-3/4 (H) inches

**Accessories**
- Owner’s Manual, AC Adaptor, Power cord, Rubber Foot x 4

---

**XS-62S**

- Dissolve Mode, making it possible to output or event. The AUX bus is also available in Dissolve Mode. Dissolve Mode is easily cross dissolve to the PGM bus are possible in DISSOLVE mode.

- DSK (Luminance Key, Chroma Key) *2
- Composition: PinP (SQUARE, CIRCLE, HEART, DIAMOND) *2, SPLIT (4 types) *2
- Other: Flip horizontal, Still Image Capture, Still Image Playback, Test pattern output, Input Freeze

* These effects depend on Output Mode
Everything you need, on a single screen

- Combine up to four HDMI video sources on to a single output
- Connect and switch multiple resolutions simultaneously
- Motion Scene Switching for fluid transitions between complex screen sets
- Simple set-up and remote switching with browser-based network control
- Audio management and connection to external audio devices
- Keyer function for overlays and advanced compositions
The Roland VP-42H Video Processor layers and arranges multiple video sources to a single screen with dynamic transitions for effective and engaging presentations, digital signage and meeting applications.

**Large event presentations**

LED walls and projections make a big impact at corporate events, and the VP-42H can customize the display of the various data sources needed for presentations. With 10bit 4:4:4 video processing for pixel accurate color, the VP-42H ensures that detailed data sources such as spreadsheets are sharp and clear for the audience to read. And as you’ve got their attention, impress the audience with smooth and dynamic Motion Scene Switching. It makes everything look more exciting—even spreadsheets.

**Digital signage processor**

Create engaging digital signage with multiple content layers, overlays and motion-based transitions. The VP-42H can automatically switch between scenes, based on a preset interval, for exciting, eye-catching displays. And you can make it all happen from just about anywhere in the world, by connecting remotely and updating the VP-42H via a web browser.

**Meeting rooms**

Combine information from multiple sources including video conferences and presentations. Have all the key info on the same screen and easily switch between views to improve the delivery of information in meetings. And Motion Scene Switching makes transitioning between sources very impressive—especially when showing clients.

**Video production multi-viewer**

The VP-42H is a highly flexible multi-viewer for video production. Most multi-viewers simply provide a quad display but the VP-42H enables custom sizing for each source window, and scenes can be set up for instant access to a variety of multi-view configurations. The VP-42H can also de-embed audio being transported over HDMI, routing the audio to local speakers for improved monitoring.
Flexible audio capability

The Roland VP-42H includes stereo RCA outputs for de-embedding audio from connected HDMI sources and outputting it to other devices such as speakers and mixers. Levels for each source can be set by the internal audio mixer, and if the VP-42H is being used as a compositor for recording or streaming, the audio from an external mixer or other sources can be connected to the RCA inputs and embedded into the HDMI output signal.

Maximum effect, minimum effort

The VP-42H goes way beyond typical switchers. You can instantly switch between ‘scenes’ containing preset arrangements of layered sources in customizable inset windows. The VP-42H smoothly transitions between current and next scenes by automatically moving and resizing the windows to their new positions. And highly impressive scene changes that used to take hours to program now happen at the touch of a button.
Simple, solid switching

Not all events require creative display and advanced scene transition capabilities. For simpler scenarios, the VP-42H functions as a true cross-dissolve seamless switcher, with a keyer to create overlays and the ability to display still images via USB drive—perfect for logos and safety slides.

Fast and convenient browser-based setup

Quickly configure scenes by using the web browser interface for your network-connected VP-42H. Each input’s layer can be scaled, cropped, zoomed and positioned by simply clicking and dragging. So even at a large event, a VP-42H connected to a big display will be up and running in seconds, letting you use a wirelessly connected tablet to set up compositions in no time.

Customizable compositions

Traditionally, layering and switching multiple sources within a single display is complicated and expensive, requiring highly skilled operators to keep it all working. This has pushed the technology out of reach for most event producers—until now. The Roland VP-42H video processor offers customizable compositions for up to four inputs, with motion-based scene switching for a stunning visual impact.

SPECIFICATIONS VP-42H

<table>
<thead>
<tr>
<th>VIDEO</th>
<th>AUDIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processing</td>
<td>Sample Rate</td>
</tr>
<tr>
<td>Input Connectors</td>
<td>HDMI: HDMI type A x 4, AUDIO INPUT: RCA pin type</td>
</tr>
<tr>
<td>Output Connectors</td>
<td>HDMI: HDMI type A x 2, *HDCP Supported</td>
</tr>
<tr>
<td>Formats</td>
<td>HDMI OUTPUT: 10 dBu (Maximum: +8 dBu)</td>
</tr>
<tr>
<td>Composition</td>
<td>Input Impedance</td>
</tr>
<tr>
<td>Transition</td>
<td>Output Impedance</td>
</tr>
<tr>
<td>Still Image</td>
<td>Output Level</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Connectors</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Functions</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Power Supply</td>
</tr>
<tr>
<td>Current Draw</td>
</tr>
<tr>
<td>Power Consumption</td>
</tr>
<tr>
<td>Operation Temperature</td>
</tr>
<tr>
<td>Dimensions</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Weight</td>
</tr>
<tr>
<td>Accessories</td>
</tr>
</tbody>
</table>

\* 0 dBu=0.775 Vrms

\* Conforms to CEA-861-E, VESA DMT Version 1.0 Revision 11 |

\* Frame rate is 59.94 Hz (NTSC) or 50 Hz (PAL) |

\* Output only |

\*2) Output refresh rate is 75 Hz when frame rate is set to 50 Hz.
P-20HD VIDEO INSTANT REPLAYER

Transform sports production

- Slow-motion instant replay and variable speed playback
- Intuitive controls for single-operator sports production
- Simultaneous recording and playback
- Clip playlist builder for creating highlight reels
- Integrated color LCD for preview monitoring
- Capture long events to low cost and widely available SD cards
- Compact, portable, and reliable hardware design
- Ideal for school sports, esports, and sports training
Record and replay at the same time

The P-20HD records directly to high-capacity SD cards, which are widely available and easy to swap out. And as you cue up and replay clips, the game keeps recording in the background, with no gaps in the action. The SD card also holds school logos, sponsor graphics, and other still images. Images can be recalled on cue and layered on top of the recorded clips or displayed at full HD resolution.

Plays well with others

The P-20HD can be seamlessly inserted into a variety of workflows. Use it on its own, or upstream or downstream of any Roland video switcher. Connect two cameras and switch/composite between sources to capture them for replay. Both HDMI inputs feature built-in scalers, providing worry-free connectivity with nearly any video source.

Create highlight and training reels

After the action’s over, use the media playlist builder to aggregate clips into curated pro videos, ready for distribution and sharing on your favorite platform. Celebrate the best moments of a game on social media, or distribute practice and training sessions to coaches and players for further evaluation.

Superb audio quality

The P-20HD features the high-quality sound processing that Roland is famous for. Stereo audio I/O is supported via embedded HDMI and analog RCA jacks, and there’s a convenient headphones jack for signal monitoring. Onboard EQ, limiter, and delay effects are also available to enhance the sound and eliminate audio and video sync issues.
One person operation

A pro sports network broadcast has a dedicated team that handles replay duties. With the P-20HD, a single operator can easily mark, cue, and replay clips while managing other elements of a production. Simply register events as clips with button taps while recording, and then instantly play them back with dedicated panel switches. A Version 1.2 Keyboard plus a BOSS footswitch and expression pedal enable you to execute different switcher commands more easily. USB Keyboard supports renaming projects and clips as well.

Direct-access controls

Filled with single-task hardware controls, the P-20HD provides a hands-on experience that lets you get the job done with zero frustration. Dedicated transport buttons include play, pause, forward, rewind, mark in, and mark out. A jog/shuttle wheel with optical encoding provides precise, fluid control to scrub clips for replay and editing, while the T-bar lets you adjust playback speed. Engaging the Speed Range function provides ultra-fine control, perfect for focusing on tight action and contested plays.

Universal file compatibility

The P-20HD records natively in H.264*, one of the most universally supported file formats available. H.264 maintains high quality even at low bit rates, providing excellent video at reduced file sizes. All of the most popular online video platforms accept H.264 format, letting you upload files created on the P-20HD with no conversion steps in-between. Version 1.2 The P-20HD exports projects and clips in MP4 file format.

Visually engage with fans

Draw lines or diagram the trajectory of the action to help fans analyze the play and help make commentary easier to understand. Draw with various colors, and shapes, even control the playback speed of the video. Beginning with version 1.10, real-time annotation over video is economical, and simple with the P-20HD and a connected Wacom Tablet*.

Take local sports production to the next level

When watching a sporting event live or on a broadcast stream, today’s audiences expect the high production values they see when watching pro teams on network TV. With the P-20HD, adding the magic of instant replay to your workflow has never been more simple and affordable. Using intuitive controls and the integrated color LCD, you can easily cue up replays of important action to let fans relive the moment, either on your streaming feed or live event screens—or both at once.
**SPECIFICATIONS P-20HD**

### VIDEO

**Video Processing**
4.2.2 (YPbPr), 8-bit

**Input Connectors**
- MAIN: HDMI type A x 2 * Multi-format Supported
- PREVIEW: HDMI type A

**Input Formats**
- MAIN: 2059/59.94, 720/59.94, 1080/59.94, 1080/50.2, 1080/50.1, 1080/50i, 1080/50p, 720/50p, 720/50i, 720/50p, 720/50i, 720/50p, 720/50i, 720/50p, 720/50i, 720/50p, 720/50i

**Output Formats**
- MAIN: 2059/59.94, 720/59.94, 720/50p, 720/50i, 1080/59.94, 1080/50.2, 1080/50.1, 1080/50i, 1080/50p, 720/50p, 720/50i, 720/50p, 720/50i

**Recording mode**
- File format: MPFG2-TS
- CODEC: H.264 High, 4:1:2:0
- AAC LC 128kbps, 48kHz, 16bit stereo

**Recording media**
- SD/SDHC/SDXC card

**Video Effects**
- Composition: PnP, SPLIT
- Transition: CUT, MIX, WIPE
- Composition: PinP, SPLIT

**Audio Processing**
- Sample rate: 24 bits/48 kHz
- Linear PCM, 24 bits/48 kHz, 2ch

**Input Connectors**
- MAIN: HDMI Type A x 2, AUDIO IN: RCA phone type

**Output Connectors**
- MAIN OUT: HDMI type A, PREVIEW OUT: RCA phone type, PHONES Stereo 1/4-inch phone type

**Input Level**
- AUDIO IN: -10 dBu (Maximum: +8 dBu)

**Input Impedance**
- AUDIO IN: 15 k ohms

**Output Level**
- AUDIO OUT: -10 dBu (Maximum: +8 dBu)

**Output Impedance**
- AUDIO OUT: 1 k ohm, PHONES: 16 ohms

**Audio Effects**
- Delay, High pass filter, compressor, Noise gate, Equalizer, Limiter, Test tone output

**Audio Player**
- File format: WAV (Linear PCM, 48kHz/48kHz, 16bit, stereo

**Miscellaneous**

**Owner’s Manual, AC adaptot, Power cord

**Accessories**
- USB HOST port: USB A type (For USB flash drive, Wacom tablet, USB keyboard), LAN port: RJ-45, 10/100BASE-T (For remote control, FTP), RS-232 connector: DB-9 type (Male, for remote control, switcher control), CTL/EXP 1, 2: 1/4-inch TRS remote control, FTP), RS-232 connector: DB-9 type (Male, for remote control, switcher control), CTL/EXP 1, 2: 1/4-inch TRS remote control, FTP), RS-232 connector: DB-9 type (Male, for remote control, switcher control), CTL/EXP 1, 2: 1/4-inch TRS

**Dimensions**
- 265 (W) x 216 (D) x 87 (H) mm

**Weight**
- 1.2 kg, 2 lbs 11 oz

**Power Supply**
- AC Adaptor

**Current Draw**
- 3 A

**Power Consumption**
- 36 W

**Operation Temperature**
- 0 to +40 degrees Celsius, -10 to +30 degrees Fahrenheit

**Accessories**
- Owner’s Manual, AC adaptor, Power cord

---

* 0 dBu=0.775 Vrms
VC-100UHD 4K VIDEO SCALER

Scale, convert, and stream

- Professional A/V signal management in a compact and robust unit
- Internal YCbCr 4:4:4 10-bit Lossless Processing
- HDMI YCbCr 4:4:4 10-bit Input / Output
- High frame rate support at 100, 120, 144, 200 and 240 Hz with drop frame
- Features 12G-SDI and HDMI 2.0 I/O with Roland’s Ultra Scaler video processing technology
- Display processing for multiple audiences: 4K, HD, and web streaming
- USB 3.0 webcam output for livestreaming broadcasts
- Advanced visual effects and image processing
- New region of interest switching by USB numeric keypad
- Professional audio processing with flexible patching
- Front panel menu LCD
Introducing the Roland VC-100UHD, a next-generation A/V signal management solution for live events, fixed installations, and livestreaming. Built on a reliable hardware platform for mission-critical applications, this powerhouse processor combines multiple single-task technologies in a compact and flexible half-rack design.

**Process images for multiple audiences at once**

Using the VC-100UHD, it’s a simple task to send 4K and 1080p video to multiple destinations at one time, including pixel-hungry LED walls, tech operator displays and recorders, and USB webcam streams for online viewing. With an ultra-high-definition source signal connected to the 12G-SDI or HDMI 2.0 video inputs, the VC-100UHD will automatically process and convert it to different resolutions, ready for distribution at 12G-SDI, HDMI, and USB 3.0 rear-panel outputs.

**Using USB numeric keypad like PTZ cameras**

Produce multi-shot productions with a single 4K camera or zoom in and highlight the details of a presentation using the VC-100UHD's built-in Region of Interest (ROI) function. Creating an innovative viewer experience has never been easier; connect any 4K video input source to zoom, move, crop, and scale up to eight regions of interest windows. Switch between the ROI windows using any USB numeric keypad to use it like PTZ camera in the live event operation.

**Lossless conversion**

When setting YCbCr4:2:2, 10-bit input / output and 10-bit internal processing maintain the fineness of the color and gradation of the input material. Compared to 8-bit processing, it can display more colors and express a more natural and smooth gradation.

**Onboard visual effects and image processing**

Using the VC-100UHD’s built-in visual effects, it’s simple to rotate, flip, and mirror images. For example, a portrait image generated by a smartphone can be trimmed and rotated to fit seamlessly on a 16:9 landscape display for digital signage. And with the VC-100UHD’s Frame Synchronizer and Genlock features, you can easily re-clock and stabilize video images as needed.
The ultra-reliable ultra scaler

The VC-100UHD features Roland's revolutionary Ultra Scaler, the same no-compromise, ultra-reliable professional video processor found in the flagship V-600UHD 4K video switcher. Backed by a lightning-fast processing engine, Ultra Scaler delivers premium quality conversion for perfectly synchronized big-screen IMAG and precise dot-by-dot scaling for LED wall displays. Roland's Ultra Scaler supports: 10-bit 4:4:4 pixel-accurate color, Rec. 601, 709 and 2020 wide color gamut, High dynamic range processing and conversion, 1080p high frame rate (HFR) video at 100, 120, 144, 200, and 240 Hz, Native DCI Digital Cinema System 4K (4096) resolution

*HDMI input only

High frame rates? No problem.

High frame rate (HFR) video sources can pose signal workflow challenges for integrated systems, but the VC-100UHD handles them with ease. Thanks to Ultra Scaler technology, system designers can simultaneously deliver 1080p video at rates up to 240 Hz for a gaming monitor, 59.94/50 Hz for an HD video system and LED displays, and 59.94/50 Hz for an HD livestream broadcast.

*HDMI input only
USB 3.0 webcam output for streaming and recording

Reach a worldwide audience and broadcast uncompressed 1080p video at 59.94/50 Hz on popular streaming platforms with the VC-100UHD. The USB 3.0 webcam output offers plug-and-play operation with the latest USB audio/video protocols, so there’s no software to download or drivers to maintain. And with Roland’s free VR Capture software, you can record your HD livestreams in ProRes 422 (Mac) or MP4 (Windows) formats for editing and distribution.

SPECIFICATIONS VC-100UHD

VIDEO

Processing | 4:4:4 (Y/Pb/Pr), 10-bit

- SDI
  - 2160p(3D)/59.94 Hz, 50 Hz (SMPTE ST2048)
  - 2160p(3D)/59.94 Hz, 50 Hz (SMPTE ST2036)
  - 1080p/59.94 Hz, 50 Hz (SMPTE ST274)
  - 1080p/59.94 Hz, 50 Hz (SMPTE ST274)

- HDMI: *1
  - 2160p(3D)/59.94 Hz, 50 Hz (CEA-861-F)
  - 2160p(3D)/59.94 Hz, 50 Hz (CEA-861-F)
  - 1080p/59.94 Hz, 50 Hz (CEA-861-F)
  - 1080p/59.94 Hz, 50 Hz (CEA-861-F)
  - 4096 x 2160/60 Hz (CEA-861-F)
  - 3840 x 2160/60 Hz (CEA-861-F)
  - 2560 x 1440/60 Hz (VESA CVA Reduced blanking)
  - 1920 x 1080/240 Hz (Pixel Clock 56.6 MHz) *2
  - 1920 x 1080/144 Hz (Pixel Clock 34.5 MHz) *2
  - 1920 x 1080/120 Hz (VESA CVA Reduced blanking) *2
  - 1920 x 1080/60 Hz (CEA-861-F)

*1 HDCP 1.4, 2.2 supported.
*2 Input and through output.

Formats

USB Streaming: *3 4:4:4 TVP, 4:2:2 TVP, 4:2:0 TVP

* The video signal frame rate can be selected Full or Half.

4K Scaler, FHD Down Scaler, Output Fade
Output Freeze, Test Pattern Generator, Rotation *6, Flip H, V, Edge Enhancer Motion Adaptive Deinterlacer, Color Correction, Dynamic Range Conversion *6 Require to disable Sub Processing to use.

FUNCTIONS

EDID Emulator
Genlock
Preset Memory x 8

Display
Graphic LCD 256 x 64 dots

Power Supply
AC Adaptor

Current Draw
2.3 A (DC 24V)

Power Consumption
55 W

Weight
2.2 kg (4 lbs 14 oz)

Accessories
Owner’s Manual, Leaflet “USING THE UNIT SAFELY”, AC adaptor, Power cord, Rubber feet (4 pcs.), Rack mount angle set, DC Plug Stopper

* 0 dBu = 0.775 Vrms

CONNECTORS

Input Connectors
- 12G-SDI IN: BNC type (SMPTE ST2082, ST2081, 242M, 259M)
- HDMI 4K IN: HDMI type A
- STREAMING: USB type B (USB3.0)

- LINE IN: 38 k ohms
- AUDIO IN: 15 k ohms

Output Connectors
- 12G-SDI OUT: BNC type (SMPTE ST2082, ST2081, 242M, 259M)
- 12G-SDI THRU: BNC type
- HDMI 4K OUT: HDMI type A
- STREAMING: USB type B (USB3.0)

- LINE OUT: RCA phono type
- AUDIO OUT: DB-25 female type (Balanced audio 2 ch)

REFERENCE THRU/OUT: BNC type (Black Burst)

Output Connectors
- 12G-SDI OUT: BNC type (SMPTE ST2082, ST2081, 242M, 259M)
- HDMI 4K OUT: HDMI type A
- STREAMING: USB type B (USB3.0)

- LINE OUT: RCA phono type
- AUDIO OUT: DB-25 female type (Balanced audio 2 ch)

LOCATION

Functions
- USB HOST: USB A type (USB2.0) (for USB flash drive)
- REMOTE: RJ45 type

OTHERS

Display
Graphite LCD 256 x 64 dots

Power Supply
AC Adaptor

Current Draw
2.3 A (DC 24V)

Power Consumption
55 W

Weight
2.2 kg (4 lbs 14 oz)

Accessories
Owner’s Manual, Leaflet “USING THE UNIT SAFELY”, AC adaptor, Power cord, Rubber feet (4 pcs.), Rack mount angle set, DC Plug Stopper

* 0 dBu = 0.775 Vrms
VC-1 Series

VC-1-SH  SDI TO HDMI

Conversion of video and audio signals from SDI input to HDMI output

- SDI to HDMI conversion
- Lossless image conversion
- 3G (Level A and B)/HD/SD SDI
- HDCP support
- Selectable channel for Embedded/De-embedded audio

* Up/Down/Cross, Frame rate, I/P, and Aspect ratio conversion are not supported.

VC-1-HS  HDMI TO SDI

Conversion of video and audio signals from HDMI input to SDI output

- HDMI to SDI conversion
- Lossless image conversion
- 3G (Level A and B)/HD/SD SDI
- HDCP support
- Selectable channel for Embedded/De-embedded audio

* Up/Down/Cross, Frame rate, I/P, and Aspect ratio conversion are not supported.
VC-1-DL  FS DELAY

Bi-directional conversion of video and audio signals from HDMI to SDI or SDI to HDMI with frame sync and delay

- HDMI to SDI/SDI to HDMI conversion
- Lossless image conversion
- 3G (Level A and B)/HD/SD SDI
- HDCP support
- Selectable Channel for Embedded/De-embedded Audio
- Audio/Video Delay - up to 9 fields (4.5 frames)

* Up/Down/Cross, Frame rate, I/P, and Aspect ratio conversion are not supported.
* When frame synchronizer is working, CH 3-8 of HDMI and CH 3-16 of SDI audio output are not available.

VC-1-SC  SCAN CONVERTER

Up/down/cross scan converter to SDI/HDMI with frame sync

- 3G (Level A and B)/HD/SD SDI In/Out
- HDMI In/Out
- RGB/Component In
- Composite In
- HDCP support
- Built-in Frame Synchronizer and Scaler
- Up/Down/Cross, Frame Rate*, I/P, and Aspect Ratio conversion
- Audio embedding or De-embedding
- VC-1 RCS, dedicated PC/Mac Software App
VC-1-DMX
VIDEO LIGHTING CONVERTER

Dynamic light shows — no operator needed

- Automatically generates dynamic lighting effects to enhance any event
- Real-time analysis and lightning-fast processing with advanced Roland technology
- Analog audio also supported with stereo I/O
- Customize DMX settings with dedicated software for macOS and Windows
- Outputs a DMX signal synchronized with incoming video and audio signals

- Connect your A/V source to the HDMI input for analysis and distribute the unprocessed signal to a monitor or switcher via HDMI thru
- Supports external MIDI control via dedicated MIDI input and USB MIDI
- Select channel maps for various DMX lighting fixtures with dip switches on the side panel

VERSION 2.0 EXPANDED AUDIO FREQUENCY CONTROL

The VC-1-DMX Version 2.0 update brings powerful enhancements for more lighting control. A new audio filter with 15 fully adjustable bands provides deeper, more detailed sound control for a DMX lighting rig. And the VC-1-DMX can now be used with just an analog audio source, making it even easier to create light shows that dance to the incoming music.

SPECIFICATIONS VC-1-DMX

<table>
<thead>
<tr>
<th>VIDEO</th>
<th>AUDIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Connectors</td>
<td>AUDIO IN jacks: RCA phono type, HDMI IN connector: HDMI type A</td>
</tr>
<tr>
<td>Output Connectors</td>
<td>AUDIO OUT jacks: RCA phono type, HDMI THRU connector: HDMI type A</td>
</tr>
<tr>
<td>Digital Audio Format</td>
<td>Linear PCM, 48 kHz, 24 bits, stereo</td>
</tr>
<tr>
<td>Audio Processing</td>
<td>Sample rate: 48 kHz, 24 bits</td>
</tr>
<tr>
<td>Nominal Input Level</td>
<td>AUDIO IN jacks: -10 dB (Maximum input level: -8 dBu)</td>
</tr>
<tr>
<td>Nominal Output Level</td>
<td>AUDIO OUT jacks: -10 dB (Maximum input level: +8 dBu)</td>
</tr>
<tr>
<td>Input Impedance</td>
<td>AUDIO IN jacks: 15 k ohms</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>AUDIO OUT jacks: 1 k ohms</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DMX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Connectors</td>
</tr>
<tr>
<td>DMX OUT 5 pin jack: XLR type (5 pins)</td>
</tr>
<tr>
<td>DMX channel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Terminal</td>
</tr>
<tr>
<td>Switches</td>
</tr>
<tr>
<td>Indicator</td>
</tr>
<tr>
<td>Functions</td>
</tr>
<tr>
<td>Power Supply</td>
</tr>
<tr>
<td>Current Draw</td>
</tr>
<tr>
<td>Current Consumption</td>
</tr>
<tr>
<td>Operation Temperature</td>
</tr>
<tr>
<td>Dimensions</td>
</tr>
<tr>
<td>Weight (excl. AC adaptor)</td>
</tr>
<tr>
<td>Accessories</td>
</tr>
</tbody>
</table>

* 0 dBu=0.775 Vrms
## SDI CABLES

### BLACK SERIES
### SDI CABLE

SDI cable designed to transmit high-speed digital signals precisely

SDI cable, 1 m length. Also available in 2 m (RCC-6-SDI), 3 m (RCC-10-SDI), 5 m (RCC-16-SDI), 7.5 m (RCC-25-SDI), 15 m (RCC-50-SDI), 30 m (RCC-100-SDI), and 60 m (RCC-200-SDI) lengths

## HDMI CABLES

### BLACK SERIES
### HDMI CABLE

HDMI cable designed to transmit high-speed digital signals precisely

HDMI 2.0 cable, 1 m length. Also available in 2 m (RCC-6-HDMI), 3 m (RCC-10-HDMI), 5 m (RCC-16-HDMI), and 7.5 m (RCC-25-HDMI) lengths

## CB-BV1

The perfect accessory for your Roland V-1HD or V-1SDI Video Switcher

For Roland V-1HD or V-1SDI Video Switcher, durable exterior materials, fleece interior and foam padding, interior/exterior: black 600D polyester and ripstop nylon

CARRYING BAG
## Index

<table>
<thead>
<tr>
<th>A</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AeroCaster VRC-01</td>
<td>Livestreaming System</td>
<td>56</td>
</tr>
<tr>
<td>AeroCaster Switcher</td>
<td>iOS App</td>
<td>60</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cables</td>
<td>Black Series SDI/HDMI Cables</td>
<td>91</td>
</tr>
<tr>
<td>CB-BV1</td>
<td>Carrying Bag</td>
<td>91</td>
</tr>
<tr>
<td>Comparison charts</td>
<td>V-series / VR-series</td>
<td>34</td>
</tr>
<tr>
<td>P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-20HD</td>
<td>Video Instant Replayer</td>
<td>80</td>
</tr>
<tr>
<td>S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SR-20HD</td>
<td>Direct Streaming AV Mixer</td>
<td>52</td>
</tr>
<tr>
<td>U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UVC-01</td>
<td>USB Video Capture</td>
<td>63</td>
</tr>
<tr>
<td>UVC-02</td>
<td>Web Presentation Dock</td>
<td>64</td>
</tr>
<tr>
<td>V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V-02HD MK II</td>
<td>Streaming Video Mixer</td>
<td>22</td>
</tr>
<tr>
<td>V-1HD</td>
<td>HD Video Switcher</td>
<td>14</td>
</tr>
<tr>
<td>V-1HD+</td>
<td>HD Video Switcher</td>
<td>16</td>
</tr>
<tr>
<td>V-160HD</td>
<td>Streaming Video Switcher</td>
<td>30</td>
</tr>
<tr>
<td>V-1SDI</td>
<td>3G-SDI Video Switcher</td>
<td>20</td>
</tr>
<tr>
<td>V-60HD</td>
<td>HD Video Switcher</td>
<td>10</td>
</tr>
<tr>
<td>V-600UHD</td>
<td>4K Multi-Format Video Switcher</td>
<td>6</td>
</tr>
<tr>
<td>V-8HD</td>
<td>HD Video Switcher</td>
<td>26</td>
</tr>
<tr>
<td>VC-1 SH</td>
<td>SDI to HDMI Video Converter</td>
<td>88</td>
</tr>
<tr>
<td>VC-1 HS</td>
<td>HDMI to SDI Video Converter</td>
<td>88</td>
</tr>
<tr>
<td>VC-1 DL</td>
<td>FS Delay</td>
<td>89</td>
</tr>
<tr>
<td>VC-1 SC</td>
<td>Scan Converter</td>
<td>89</td>
</tr>
<tr>
<td>VC-1DMX</td>
<td>Video Lighting Converter</td>
<td>90</td>
</tr>
<tr>
<td>VC-100UHD</td>
<td>4K Video Scaler</td>
<td>84</td>
</tr>
<tr>
<td>VP-42H</td>
<td>Video Processor</td>
<td>76</td>
</tr>
<tr>
<td>VR-1HD</td>
<td>AV Streaming Mixer</td>
<td>48</td>
</tr>
<tr>
<td>VR-6HD</td>
<td>Direct Streaming AV Mixer</td>
<td>44</td>
</tr>
<tr>
<td>VR-120HD</td>
<td>Direct Streaming AV Mixer</td>
<td>40</td>
</tr>
<tr>
<td>VR-400UHD</td>
<td>4K Streaming AV Mixer</td>
<td>36</td>
</tr>
<tr>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XS-1HD</td>
<td>Multi-Format Matrix Switcher</td>
<td>68</td>
</tr>
<tr>
<td>XS-42H</td>
<td>Matrix Switcher</td>
<td>70</td>
</tr>
<tr>
<td>XS-62S</td>
<td>HD Video Switcher</td>
<td>72</td>
</tr>
</tbody>
</table>