

# VR-4HD

HD AV Mixer

**Roland**  
Professional AV



**HDCP**

**1080P**  
PROGRESSIVE

**AUDIO**  
EMBEDDING

**USB 3.0**  
Video and Audio

# ALL-IN-ONE HD AV MIXER WITH BUILT-IN USB 3.0 FOR WEB STREAMING AND RECORDING

The VR-4HD is a complete HD studio in a compact and portable package that replaces several different pieces of complex A/V equipment.

Designed with single-person operation in mind, the VR-4HD enables easy switching and mixing of sound and video using advanced video and audio Digital Signal Processing (DSP) along with dedicated hardware controls faders, buttons and touch screen interface. It beautifully integrates a digital audio mixer, video switcher, multi-viewer touch screen and USB video/audio streaming interface into a stand-alone device.

This portable live HD production solution is ideal for schools, churches, council meetings, corporate events, sports, training sessions, or any other live event.



# VR-4HD SYSTEM PROGRAM VER.1.5

The Ver.1.5 update supports capturing a still image, sending a still image from the VR-4HD RCS on PC/Mac, and PinP 1/3 size in addition to 1/2 and 1/4 sizes.

[MORE DETAIL](#)

## MAIN FEATURES

- All-in-one portable production solution
- Easy to use with dedicated hardware controls and audio faders and integrated touch screen preview monitor
- 6 input, 4-Channel Video Switcher
- Supports HDMI\*1, RGB/Component, and Composite Video Inputs Up to 1080p
- Input 4's scaler now supports a wider range of video and VESA resolutions.\*1\*2
- Built-in Scaler via CH4
- 18-Channel Digital Audio Mixer with XLR, TRS, and RCA jacks along with audio from HDMI inputs
- Embedding and de-embedding of audio with delay settings
- Auto mixing and Echo Canceling function
- Composition effects including DSK (Downstream Keyer), picture-in-picture etc.
- Capturing a still Image from Input Video on channel 4\*3 [Ver.1.5]
- Built-in touch quad-input multi-viewer with audio metering
- External Multi-View Output through HDMI
- HDCP Support
- USB3.0 Video/Audio Output up to 1080/30p (uncompressed) and Audio Loopback Feature
- Software control using VR-4HD RCS application for Mac and PC and remote control via USB connection
- Sending a still image to the VR-4HD by VR-4HD RCS\*3 [Ver.1.5]
- Tally, GPIO connections

\*1 HDCP Compliant

\*2 Built-in EDID Emulator

\*3 The Still-image data is deleted once the power is turned off.

# VR-4HD

HD AV Mixer

## Top Panel



# VR-4HD

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## Rear Panel



## Touch Display

Astonishingly easy operation.  
Make your dissolve/transition/cut video switching by the large Video buttons and the built-in touch display.  
The touch display is also used for showing and operating the menu system.

# VR-4HD

HD AV Mixer

# Remote Software Control

**AUTO MIXING**

OFF ON ON ON OFF OFF OFF OFF OFF OFF

SOLO MUTE SOLO MUTE SOLO MUTE SOLO MUTE SOLO MUTE SOLO MUTE SOLO MUTE SOLO MUTE SOLO MUTE

47 77 71 58 100 100 100 100 100 100

HDMI 4

**AUDIO FOLLOW** OFF

	1	2	3	4
VIDEO				
CH1	ON	OFF	OFF	OFF
CH2	OFF	ON	OFF	OFF
CH3	OFF	OFF	ON	OFF
CH4	OFF	OFF	OFF	ON
AUDIO				
CH5/6	ON	ON	ON	ON
CH7/8	ON	ON	ON	ON
HDMI1	ON	OFF	OFF	OFF
HDMI2	OFF	ON	OFF	OFF
HDMI3	OFF	OFF	ON	OFF
HDMI4	OFF	OFF	OFF	ON
USB	ON	ON	ON	ON

OK

**VR-4HD RCS**

UPDATE ver.1.5.0.0

**MEMORY** SETUP

MEMORY1 MEMORY2 MEMORY3 MEMORY4 MEMORY5 MEMORY6 MEMORY7 MEMORY8

INIT SAVE

**VIDEO**

OUTPUT SETUP MAIN AUTO (1080/59.94p) PVW 1080/59.94p USB 1080/29.97p

MONITOR/PVW INPUT OUTPUT FREEZE ALL HDCP

OUTPUT FADE SETUP BLACK

COMPOSITION SETUP

PinP BACKGROUND/A VIDEO-1

SPLIT INSET/B VIDEO-1

QUAD

TRANSITION

CUT

MIX MIX

WIPE H-DOWN

TIME 0.0sec

KEY SETUP

KEY LEVEL 64

CHROMA CH4

VIDEO FX VALUE 0

OFF

INPUT SETUP

1 2 3 4 KEY

CH1: CH2: CH3: CH4:

**AUDIO MIXER**

SETUP OVER -6 -18 -30 -48

SOLO MUTE

1 2 3 4 5/6 7/8 HDMI 1 HDMI 2 HDMI 3 HDMI 4 FROM PC MAIN AUX TO PC

SYSTEM

AUTO MIXING

ECHO CANCEL

AUDIO FOLLOW

BUS SELECT

STILL IMAGE EDITOR


EDITOR

NOT READY

CONNECTION

**Roland** Image Format : 1920 x 1080 **STILL IMAGE EDITOR**

VR-4HD RCS Image Editor



Load Picture... Pen Color Fill Color Transfer Cancel

Pen Alpha 255 Fill Alpha 255

Pen Width 4 Text Font .SF NS Text: 100 pt

NOT READY OFFLINE CONNECTION

CLOSE

**AUDIO CH1**

PARAMETER EQ GATE/COMP



GATE THRESHOLD -50 dB

RELEASE 860 ms

COMP THRESHOLD -30 dB

RATIO 5.60 :1

ATTACK 1 ms

RELEASE 380 ms

AUTO GAIN ON

MAKEUP GAIN 0 dB

OK

**MAIN**

PARAMETER EQ MB COMP



EQ Hi 6 dB

EQ HI FREQ 8.50 KHz

EQ Mid -5 dB

EQ Mid FREQ 1.12 KHz

EQ Mid Q 2.0

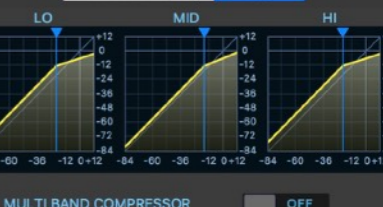
EQ Lo -5 dB

EQ Lo FREQ 37.5 Hz

OK

**MAIN**

PARAMETER EQ MB COMP



MULTI BAND COMPRESSOR OFF

HI THRESHOLD -20 dB

RATIO 3.20 :1

MID THRESHOLD -16 dB

RATIO 2.50 :1

LO THRESHOLD -20 dB

RATIO 3.20 :1

OK

# VR-4HD


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## VR Capture Recording App

for Win/Mac

Video Capture for VR

**Roland**



**RECORDING**

Video Input: VR-4HD

Audio Input: No Value

Resolution: 1280x720 (16:9)

Format: [Empty]

Image Width: 1280

Image Height: 720

Frame Rate: 50.00

Codec: H.264 + AAC

Length: [Empty]

Disk Space (MB): 15593

L 48 - 30 - 18 - 12 - 6 - 0

R

File Name: mr > Movies > Material.mov

Version 2.2 - Mac OS X

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Get a quick video introduction of the VR-4HD





## VIDEO

### Processing

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

### Input Connectors

INPUT 1-3: HDMI Type A (19 pins) x 3

\* HDCP Supported

INPUT 4: HDMI Type A (19 pins) x 1

\* HDCP Supported

RGB/COMPONENT (Mini D-sub 15-pin type) x 1

COMPOSITE (RCA phono type) x 1

\* INPUT 4: HDMI, RGB/COMPONENT or COMPOSITE selected.

### Output Connectors

MAIN OUT: HDMI Type A (19 pins) x 1

\* HDCP Supported

RGB/COMPONENT (Mini D-sub 15-pin type) x 1

PREVIEW OUT: HDMI Type A (19 pins) x 1

\* HDCP Supported

USB3.0: USB B type x 1

### Input formats

HDMI INPUT 1-3: 720/59.94p, 720/50p (SYSTEM FORMAT: 720p)

1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p (SYSTEM FORMAT: 1080i, 1080p)

INPUT 4: HDMI, RGB/COMPONENT:

480/59.94i, 576/50i, 480/59.94p, 576/50p

720/59.94p, 720/50p, 1080/59.94i, 1080/50i

1080/59.94p, 1080/50p

VGA (640 x 480/60 Hz), SVGA (800 x 600/60 Hz), XGA (1024 x 768/60 Hz)

WXGA (1280 x 768/60 Hz), SXGA (1280 x 1024/60 Hz)

FWXGA (1366 x 768/60 Hz), SXGA+ (1400 x 1050/60 Hz)

UXGA (1600 x 1200/60 Hz), WUXGA (1920 x 1200/60 Hz)

COMPOSITE: 480/59.94i, 576/50i

\* The refresh rate is the maximum value of each resolution.

\* Conforms to VESA DMT Version 1.0 Revision 1.1.

\* 1920 x 1200/60 Hz: Reduced blanking

\* The input interlaced video signal is converted to progressive video signal by internal processing.

\* The video signal frame rate can be selected at the SYSTEM menu (59.94 Hz or 50 Hz).

### Output formats

MAIN OUT (HDMI, RGB/COMPONENT): 480/59.94i, 576/50i, 480/59.94p, 576/50p

720/59.94p, 720/50p, 1080/59.94i, 1080/50i

1080/59.94p, 1080/50p

VGA (640 x 480/60 Hz), SVGA (800 x 600/60 Hz), XGA (1024 x 768/60 Hz)

WXGA (1280 x 768/60 Hz), SXGA (1280 x 1024/60 Hz)

FWXGA (1366 x 768/60 Hz), SXGA+ (1400 x 1050/60 Hz)

UXGA (1600 x 1200/60 Hz), WUXGA (1920 x 1200/60 Hz)

PREVIEW OUT: 720/59.94p, 720/50p (SYSTEM FORMAT: 720p)

1080/59.94i, 1080/50i (SYSTEM FORMAT: 1080i)

1080/59.94p, 1080/50p (SYSTEM FORMAT: 1080p)

USB3.0: 720/29.97p, 720/25p (SYSTEM FORMAT: 720p)

1080/29.97p, 1080/25p (SYSTEM FORMAT: 1080i, 1080p)

\* The MAIN OUTPUT format of HDMI and RGB/COMPONENT is always the same.

When an interlaced format is selected, component signal is output from the RGB/COMPONENT connector.

When a non-interlaced format is selected, RGB signal is output from the RGB/COMPONENT connector.

\* The video signal frame rate can be selected at the SYSTEM menu (59.94 Hz or 50 Hz).

### Video Effects

Transition: CUT, MIX (DISSOLVE/FAM/NAM/MOSAIC), WIPE (30 types)

Effects: NEGATIVE, EMBOSS, COLORIZE, COLORPASS, POSTERIZE, SILHOUETTE, MONOCOLOR, FINDEDGE (8 types)

Composition: PinP, SPLIT, QUAD, KEY (Luminance Key, Chroma Key)



## AUDIO

### Audio Processing

Sampling rate: 24 bits/48 kHz

### Audio formats

HDMI: Linear PCM, 24 bits/48 kHz, 2 ch

USB: Linear PCM, 16 bits/48 kHz, 2 ch

### Input Connectors

AUDIO IN 1-4 (XLR/TRS combo type, phantom power)

AUDIO IN 5-6 (RCA phono type)

AUDIO IN 7/8 (Stereo miniature type)

USB B type (stereo)

### Phantom Power

DC 48 V (unloaded maximum), 10 mA (maximum load)

\* Current value per channel

### Output Connectors

AUDIO OUT: L, R (XLR type)

L, R (RCA phono type)

AUX OUT: L, R (RCA phono type)

USB: USB B type (stereo)

PHONES: Stereo miniature type

## OTHERS

### Other Connectors

RS-232:

D-sub 9-pin type

Tally/GPIO:

Mini D-sub 15-pin type

USB 3.0/2.0 (device):

USB B type, USB-VIDEO (Super-Speed),

USB-AUDIO 2 IN/2 OUT (Full-Speed), remote control from PC

### Display

Graphic Color LCD, 320 x 240 dots, touch panel

+32 to +104 degrees Fahrenheit

## Signal Level and Impedance

XLR/TRS combo type

Input Signal Level : -60--+4 dBu (Maximum: +22 dBu)

Input Impedance : 10 k ohms (GAIN 0--23 dB), 5 k ohms (GAIN 24--64 dB)

RCA phono type

Input Signal Level : -10 dBu (Maximum: +8 dBu)

Input Impedance : 15 k ohms

Output Signal Level : -10 dBu (Maximum: +8 dBu)

Output Impedance : 1 k ohm

XLR type

Output Signal Level : +4 dBu (Maximum: +22 dBu)

Output Impedance : 600 ohms

Miniature type

Input Signal Level : -15 dBu (Maximum: +3 dBu)

Input Impedance : 15 k ohms

Headphones

Output Signal Level : 75 mW + 75 mW

Output Impedance : 32 ohms

## Audio Effects

Auto Mixing, Echo Cancel, EQ, Delay, Compressor, HPF, Gate, Reverb,  
Multi-Band Compressor, Limiter

## Other Functions

MEMORY (8 types)

FREEZE (input video captured)

OUTPUT FADE (Audio, Video: WHITE or BLACK)

## Power Supply

AC Adaptor

## Current Draw

3 A

## Power Consumption

36 W

## Operation Temperature

+0 to +40 degrees Celsius

+32 to +104 degrees Fahrenheit



## Dimensions

339 (W) x 217 (D) x 87 (H) mm

13-3/8 (W) x 8-9/16 (D) x 3-7/16 (H) inches

## Weight (excluding AC adaptor)

2.4 kg

5 lbs 5 oz

## Accessories

Owner's manual

AC adaptor

Power cord

## Notes

\* 0 dBu=0.775 Vrms