

Technical Specifications Roland VR-6HD

VIDEO

Video Processing

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

Number of Video Channels

6 channels

Video Input Formats

VIDEO IN 1--6

480/59.94i, 480/59.94p, 720/59.94p, 1080/59.94i, 1080/59.94p, 1080/60p, 1080/29.97p, 1080/30p *1

576/50i, 576/50p, 720/50p, 1080/50i, 1080/50p, 1080/25p *2
1080/23.98p, 1080/24p

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

WXGA (1280 x 800/60 Hz), SXGA (1280 x 1024/60 Hz)

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

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

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

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

* 1920 x 1200/60 Hz: Reduced blanking

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

*1 Frame Rate = 59.94 Hz, 60 Hz

*2 Frame Rate = 50 Hz

Video Output Formats

VIDEO OUT 1--3:

720/59.94p *1, *4, 720/60p *1, *5, 720/50p *1, *8, 1080/59.94i *2, *4, 1080/60i *2, *5, 1080/50i *2, *8, 1080/59.94p *3, *4, 1080/60p *3, *5, 1080/29.97p *3, *6, 1080/30p *3, *7, 1080/50p *3, *8, 1080/25p *3, *9

1080/23.98p *3, *10, 1080/24p *3, *11

*1 Output Format = 720p

*2 Output Format = 1080i

*3 Output Format = 1080p

*4 Frame Rate = 59.94 Hz

*5 Frame Rate = 60 Hz

*6 Frame Rate = 29.97 Hz

*7 Frame Rate = 30 Hz

*8 Frame Rate = 50 Hz

*9 Frame Rate = 25 Hz

*10 Frame Rate = 23.98 Hz

*11 Frame Rate = 24 Hz

USB STREAM:

1080/59.94p, 720/59.94p, 640 x 480/59.94p *1

1080/60p, 720/60p, 640 x 480/60p *2

1080/29.97p, 720/29.97p, 640 x 480/29.97p *3

1080/30p, 720/30p, 640 x 480/30p *4

1080/50p, 720/50p, 640 x 480/50p *5

1080/25p, 720/25p, 640 x 480/25p *6

1080/23.98p, 720/23.98p, 640 x 480/23.98p *7

1080/24p, 720/24p, 640 x 480/24p *8

* Uncompressed format (YUY2) and Compressed format (Motion JPEG) supported.

*1 Frame Rate(USB Out) = 59.94 Hz

*2 Frame Rate(USB Out) = 60 Hz

- *3 Frame Rate(USB Out) = 29.97 Hz
 - *4 Frame Rate(USB Out) = 30 Hz
 - *5 Frame Rate(USB Out) = 50 Hz
 - *6 Frame Rate(USB Out) = 25 Hz
 - *7 Frame Rate(USB Out) = 23.98 Hz
 - *8 Frame Rate(USB Out) = 24 Hz
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Stream and Record formats

- 720/59.94p *1, *3, 720/60p *1, *4, 720/29.97p *1, *5, 720/30p *1, *6, 720/50p *1, *7, 720/25p *1, *8, 1080/59.94p *2, *3, 1080/60p *2, *4, 1080/29.97p *2, *5, 1080/30p *2, *6, 1080/50p *2, *7, 1080/25p *2, *8, 1080/23.98p *2, *9, 1080/24p *2, *10
- *1 Output Format = 720p
- *2 Output Format = 1080p
- *3 Frame Rate (Stream/Record) = 59.94 Hz
- *4 Frame Rate (Stream/Record) = 60 Hz
- *5 Frame Rate (Stream/Record) = 29.97 Hz
- *6 Frame Rate (Stream/Record) = 30 Hz
- *7 Frame Rate (Stream/Record) = 50 Hz
- *8 Frame Rate (Stream/Record) = 25 Hz
- *9 Frame Rate (Stream/Record) = 23.98 Hz
- *10 Frame Rate (Stream/Record) = 24 Hz

File Format: MP4

Codec:

H.264, target bitrate up to 20,000 kbps

AAC LC, 16 bits, 48 kHz, stereo, target bitrate up to 384 kbps

File Format: WAV

Codec:

Linear PCM, 16 bits, 48 kHz, stereo

* If either the streaming and recording format or the file played by the video player exceeds 1080/30p, the streaming and recording and video player functions cannot be used simultaneously.

* If the bitrate setting for Streaming and Recording and the bitrate of the file played on Video Player exceeds 20,000 kbps, Streaming and Recording and Video player cannot be used simultaneously.

Video Player

File Format: MP4 (H.264, AAC), Average bit rate of 20,000 kbps or less, Maximum 1080/60p

* If either the streaming and recording format or the file played by the video player exceeds 1080/30p, the streaming and recording and video player functions cannot be used simultaneously.

* If the bitrate setting for Streaming and Recording and the bitrate of the file played on Video Player exceeds 20,000 kbps, Streaming and Recording and Video player cannot be used simultaneously.

Still Image:

Bitmap File (.bmp) Maximum 1920 x 1080 pixels, 24-bit color, uncompressed.

PNG File (.png) Maximum 1920 x 1080 pixels, 24-bit color

JPEG File (.jpg, .jpeg) Maximum 1920 x 1080 pixels, 24-bit color

* It can be stored up to 16 files in the internal memory.

* It can be exported in the SD Card and USB flash drive.

* PNG alpha channel supported.

Video Effects

Transition: Cut, Mix (Dissolve/Fam/Nam), WIPE (8 types), SPLIT (2 types)

Composition: PinP x 2 (Square, Circle, Diamond), Keyer x 2 (Luminance Key, Chroma Key), DSK (Luminance Key, Chroma Key, Alpha Key, External Key)

Others: Multi-View (3 types), Flip horizontal, Flip vertical, Still Image capture, Still Image playback, Output fade (Audio, Video: White or Black), Test pattern output, Stream Delay

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, 2 ch

Bluetooth (input): Linear PCM, 24 bits, 48 kHz, 2 ch

VIDEO IN: Linear PCM, 24 bits, 48 kHz, 2 ch

VIDEO OUT: Linear PCM, 24 bits, 48 kHz, 8 ch

Audio Player

File format: WAV (Linear PCM, 16 bits, 48 kHz/44.1 kHz, stereo)

* It can be stored up to 16 tracks in the internal memory.

Audio Effects

Channel Effects: High pass filter, Echo canceller, Anti-feedback, Noise gate, De-esser, Compressor, 4-Band equalizer, Voice changer, Delay, Auto mixing

Master Effects: Reverb, 4-Band equalizer, Compressor/Limiter, Loudness Auto Gain Control, Adaptive Noise Reduction, Low Frequency Cut, 15-Band GEQ, Delay

Others: Output fade, Test tone output

COMMON SECTION

Recording Media

SDHC/SDXC card (sold separately)

USB Memory (sold separately)

* SDXC card is required for video recording.

Other Functions

Scene Memory (32 types)

Macro Control (100 types)

Sequencer Control (1000 types)

Panel lock function

EDID Emulator

Auto Switching

Auto Input Detect

Smart Tally

Remote Camera Control (Up to 6 units)

External Rec Control

CONNECTORS

Video Input Connectors

VIDEO IN 1--6: HDMI type A x 6
* HDCP Supported
* Multi-format Supported

Video Output Connectors

VIDEO OUT 1--3: HDMI type A x 3
* HDCP Supported

USB STREAM: USB Type-C (TM)

Audio Input Connectors

Analog:
AUDIO IN 1--6: Combo type (XLR, 1/4-inch TRS phone), phantom power DC 48 V (unloaded maximum), 14 mA (maximum load)
AUDIO IN 7/L, 8/R: RCA phono type

Digital:
USB STREAM: USB Type-C (TM)
Bluetooth
VIDEO IN 1--6: HDMI type A x 6

Audio Output Connectors

Analog:
AUDIO OUT 1/L, 2/R: XLR type
AUDIO OUT 3/L, 4/R: RCA phono type
PHONES: Stereo miniature phone type

Digital:
USB STREAM: USB Type-C (TM)
VIDEO OUT 1--3: HDMI type A x 3

Other Connectors

USB HOST: USB A type (for USB flash drive)
USB STREAM: USB Type-C (TM) (for remote control from PC and iPad)
Bluetooth: for remote control from iPad
CTL/EXP 1, 2: 1/4-inch TRS phone type (for remote control from foot switch and expression pedal)
TALLY/GPIO: DB-25 type (Female)(Tally/GPO: 16, GPI: 8)
RS-232: DB-9 type (Male) (for Remote Control)
DIRECT STREAM: RJ45, 1000BASE-TX (for Live Streaming and Remote Control)

AUDIO INPUT/OUTPUT CHARACTERISTICS

Input Level

AUDIO IN 1--6: -64--+4 dBu (Maximum: +24 dBu)
AUDIO IN 7/L, 8/R: -10 dBu (Maximum: +10 dBu)

Input Impedance

AUDIO IN 1--6: 8.4 k ohms
AUDIO IN 7/L, 8/R: 10 k ohms

Output Level

AUDIO OUT 1/L, 2/R (XLR): +4 dBu (Maximum: +24 dBu)
AUDIO OUT 3/L, 4/R (RCA): -10 dBu (Maximum: +10 dBu)
PHONES: 92 mW + 92 mW (32 ohms)

Output Impedance

AUDIO OUT 1/L, 2/R (XLR): 600 ohms
AUDIO OUT 3/L, 4/R (RCA): 1 k ohm
PHONES: 33 ohms

OTHERS

Bluetooth

Ver 5.0
Profile Support: A2DP (Audio), GATT (MIDI over Bluetooth Low Energy)
Codec: SBC (Support to the content protection of the SCMS-T method)

Display

Graphic Type, 4.3", Wide QVGA (480 x 272 dots), backlite LCD (Color/Touch screen)

Power Supply

AC Adaptor

Current Draw

2.3 A

Power Consumption

55 W

Operation Temperature

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

Dimensions

370 (W) x 242 (D) x 100 (H) mm
14-5/8 (W) x 9-9/16 (D) x 3-15/16 (H) inches

Weight (excluding AC adaptor)

3.4 kg
7 lbs 8 oz

Accessories

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

Options (sold separately)

Footswitch: BOSS FS-5U, FS-6, FS-7
Expression Pedal: EV-5, EV-30, BOSS FV-500L, FV-500H

All specifications and appearances are subject to change.