

VR-4HD

HD AV Mixer

Roland
Professional A/V



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](#)

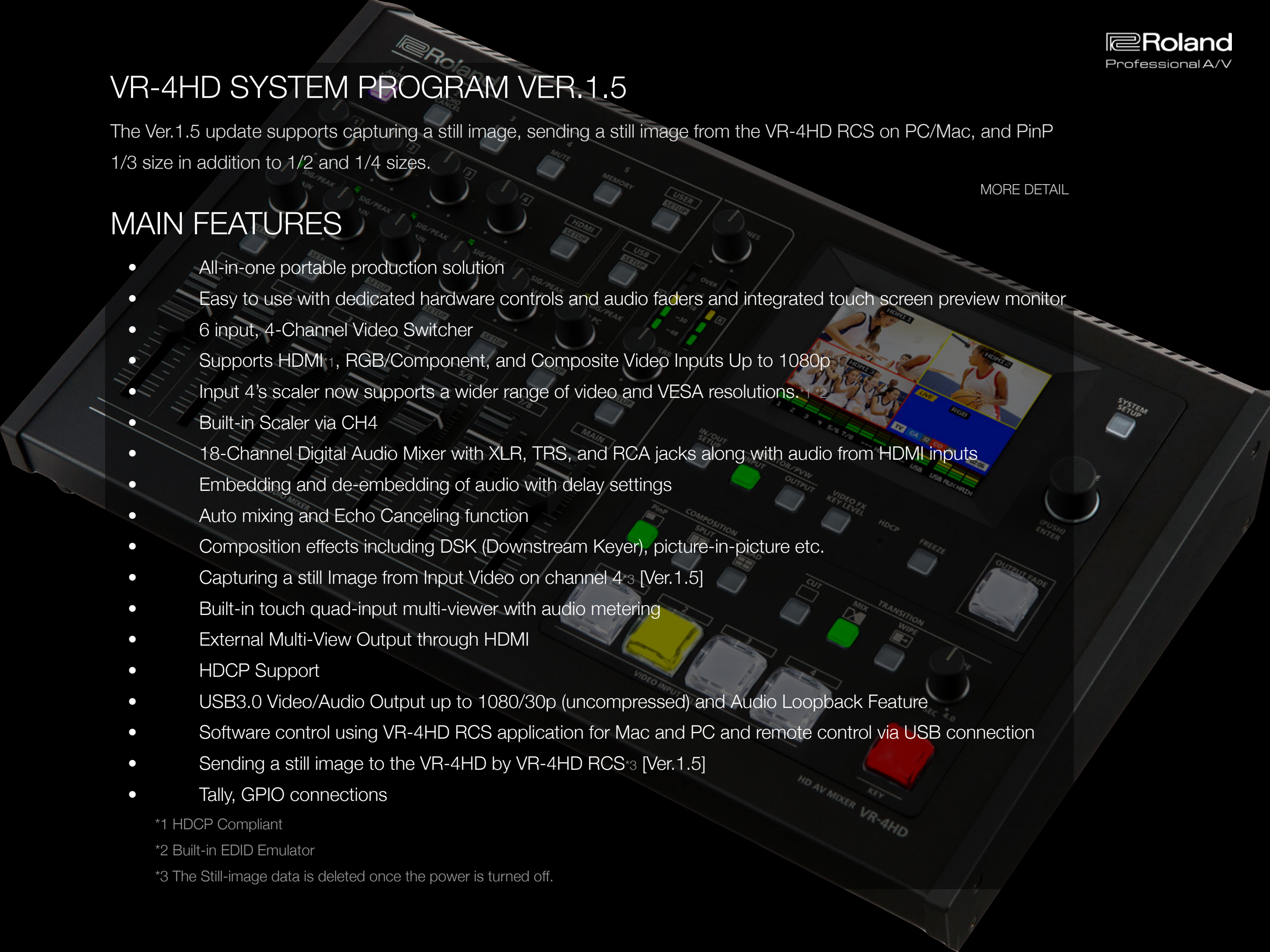
MAIN FEATURES

- 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

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Top Panel



VR-4HD

HD AV Mixer

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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.

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Remote Software Control

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AUTO MIXING

OFF ON ON ON OFF OFF OFF OFF OFF OFF

CLOSE

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

AUDIO FOLLOW OFF

VIDEO

	1	2	3	4
CH1	ON	OFF	OFF	OFF
CH2	OFF	ON	OFF	OFF
CH3	OFF	OFF	ON	OFF
CH4	OFF	OFF	OFF	ON
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
Ch-1

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 OFF VALUE 0

INPUT SETUP
CH1: -----
CH2: -----
CH3: -----
CH4: -----

AUDIO MIXER

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

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

VR-4HD RCS
Image Editor

Load Picture... Pen Color Fill Color

Pen Alpha 255 Fill Alpha 255

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

Transfer OFFLINE

NOT READY 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

LO MID HI

THRESHOLD -20 dB
RATIO 3.20 :1

THRESHOLD -16 dB
RATIO 2.50 :1

THRESHOLD -20 dB
RATIO 3.20 :1

OK

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VR Capture Recording App for Win/Mac

Video Capture for VR





L
R

48 - 30 - 18 - 12 - 6 - 0

File Name mr Movies Material.mov

RECORDING

Video Input
VR-4HD

Audio Input
No Value

Resolution
1280x720 (16:9)

Format

Image Width 1.280

Image Height 720

Frame Rate 50.00

Codec
H.264 + AAC

Length

Disk Space (MB) 15593

Version 2.2 - Mac OS X

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Get a quick video introduction of the VR-4HD



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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,

FINEDGE (8 types)

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



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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