

VC-50HD

Video Field Converter

HDV

DV

MPEG-2 TS

HD-SDI

SD-SDI

HDMI



(Actual Size)

Bi-directional video conversion between HD/SD-SDI and MPEG-2 TS/HDV/DV

- Portable and Lightweight with High Performance
- HDMI Output enables convenient monitoring
- External/Internal Battery Support

Quality video conversion in the palm of your hand.

Enables unprecedented convenience and flexibility.

A new generation of quality recording and editing

The VC-50HD can convert from HD-SDI to not only HDV format (19/25Mbps) but also 8/35/50Mbps MPEG-2 TS. The unit also supports conversion from SD-SDI to DV format (25Mbps) and 2/9/12Mbps MPEG-2 TS.

*Up/Down conversion, I/P conversion, NTSC/PAL conversion, Frame conversion are not supported.



HDMI Output allows flexible and convenient monitoring

The dedicated HDMI Output port provides display and monitoring of both the video and audio* signal. The output can also be used to directly connect to a large display or video projector.

*Audio signal is only available when the source is HD/SD-SDI.



Setup and Control via PC and/or dipswitches

The VC-50HD can be controlled using dedicated PC utility software via USB. This allows setting up direction, codec type, SDI audio channels, etc. Presets can be saved to enable quick and convenient selection via dipswitch settings.

*Dedicated utility software can be downloaded at www.rolandsystemsgroup.net



Three different types of power

AA battery x 8

AC Adaptor

External battery
(4 pinXLR 9-20V)

The VC-50HD supports three different types of power supply: AC power adaptor, AA batteries, and external battery support. The built-in 8AA battery tray can supply seamless failover power should the AC power become disconnected or while changing over external battery packs. Additionally the VC-50HD has V-Mount and Gold Mount options for use with popular external batteries systems.



Open up a new world of application opportunities

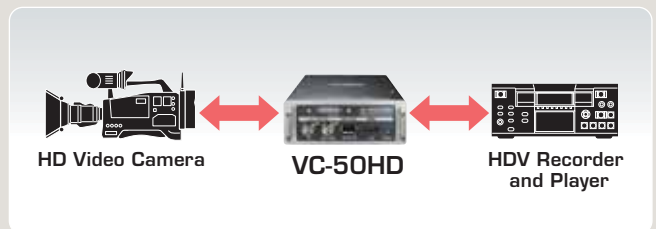
Capture directly to HDD/SDD using the EDIROL F-1 Video Field Recorder

Combining the VC-50HD with the EDIROL F-1 Video Field Recorder (Version 2.0) enables direct recording at any supported bitrate (up to 50Mbps) to hard-drive or solid state memory. MPEG-2TS 50Mbps enables higher quality video capture than HDV. Alternatively MPEG-2 TS 8Mbps enables around 27 hours of HD video recording when used with the 120GB HDD.



HD-SDI and HDV Bi-directional Video Copy

Bi-directionally convert between high quality, uncompressed HD-SDI and affordable HD format HDV devices. This is an efficient and flexible system for transfer, production and transcoding applications.



Capture directly and edit using your non-linear editing system

Most non-linear video editing systems support HDV as well as 35/50Mbps MPEG-2 TS files. Enable higher level quality video production with low overhead.



Easy capture or archiving to Blu-ray

Blu-ray/DVD recorders equipped with IEEE1394 (i.LINK) can record high quality video directly from HD/SD-SDI sources via the VC-50HD. This is ideal for high quality video backup and archiving.



VC-50HD

Video Field Converter



Specifications

Video Input Format	
IEEE1394 (i.LINK)	HDV: 1080/59.94i, 1080/50i, 720/59.94p, 720/50p DV: 480/59.94i, 576/50i MPEG-2 TS: 1080/59.94i, 1080/50i, 720/59.94p, 720/50p, 480/59.94i, 576/50i
HD/SD-SDI (SMPTE 259M-C, SMPTE 292M)	HD-SDI: 1080/59.94i, 1080/50i (SMPTE 274M) 720/59.94p, 720/50p (SMPTE 296M) SD-SDI: 487/59.94i, 576/50i (ITU-R BT.656-3, 4)
Video Output Format	
IEEE1394 (i.LINK)	HDV: 1080/59.94i, 1080/50i, 720/59.94p, 720/50p DV: 480/59.94i, 576/50i MPEG-2 TS 50/35/8*1 Mbps (HD): 1080/59.94i, 1080/50i, 720/59.94p, 720/50p MPEG-2 TS 12/9/2*1 Mbps (SD): 480/59.94i, 576/50i
HD/SD-SDI (SMPTE 259M-C, SMPTE 292M)	HD-SDI: 1080/59.94i, 1080/50i (SMPTE 274M) 720/59.94p, 720/50p (SMPTE 296M) SD-SDI: 487/59.94i, 576/50i (ITU-R BT.656-4)
HDMI	1080/59.94i, 1080/50i, 720/59.94p, 720/50p, 480/59.94i, 576/50i
Audio Input	
IEEE1394	HDV: MPEG-1 Audio Layer2 16bit 48kHz 2ch 384kbps DV: Linear PCM 16bit 48kHz 2ch MPEG-2 TS: MPEG-1 Audio Layer2 16bit 48kHz 2ch 384kbps
HD/SD-SDI Embedded Audio	HD-SDI: Linear PCM 24bit 48kHz 2ch (SMPTE 299M) SD-SDI: Linear PCM 24bit 48kHz 2ch (SMPTE 272M-AC)
Audio Output	
IEEE1394	HDV: MPEG-1 Audio Layer2 16bit 48kHz 2ch 384kbps DV: Linear PCM 16bit 48kHz 2ch MPEG-2 TS: MPEG-1 Audio Layer2 16bit 48kHz 2ch 384kbps
HD/SD-SDI Embedded Audio	HD-SDI: Linear PCM 24bit 48kHz 2ch (SMPTE 299M) SD-SDI: Linear PCM 24bit 48kHz 2ch (SMPTE 272M-C)
HDMI	Linear PCM 24bit 48kHz 2ch
Timecode In/Out	
IEEE1394	HDV: Conforms to HDV Standard DV: Conforms to IEC 61834-2 MPEG-2 TS: Conforms to IEC 13818-2
HD/SD-SDI	HD-SDI: Conforms to SMPTE RP188 (VITC, LTC) SD-SDI: Conforms to SMPTE 266M, SMPTE RP188 (VITC, LTC)

● Up/Down conversion, I/P conversion, NTSC/PAL conversion, Frame conversion are not supported.

*1 Parameter setup can be controlled by dip switch, dedicated utility software, or via the EDIROL F-1 Video Recorder directly (Version 2.0).

Connectors

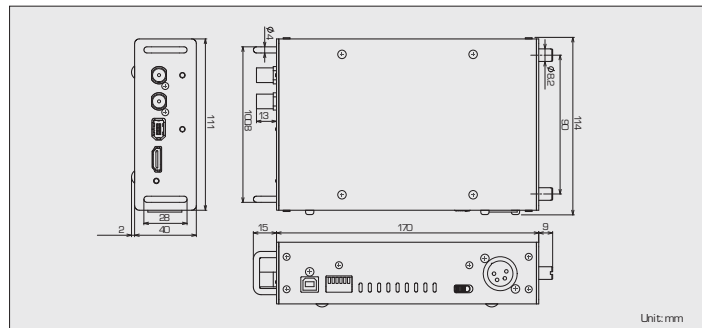
IEEE1394 Connector (i.LINK)	6-pin Type x 1 Conforms to IEEE1394-1995
HD/SD-SDI Input Connector	BNC Type x 1 Conforms to SMPTE 259M-C, SMPTE 292M
HD/SD-SDI Output/Thru Output Connector	BNC Type x 1 Conforms to SMPTE 259M-C, SMPTE 292M
HDMI Output Connector	Type A (19-pin) x 1
USB Connector	B Type x 1 Conforms to USB1.1 Full Speed
DC IN Connector	XLR 4-pin Type x 1 DC 9-20V

Others

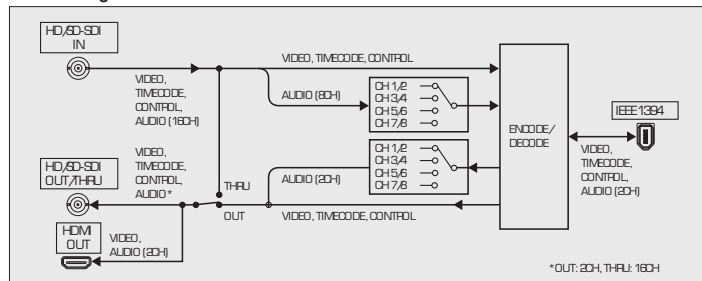
Power Supply	AC Adaptor (PSB-1U) or External Battery (DC 9-20V) or HR15/51 x 8 or LR6 (AA) x 8
Max Operation time	about 2 hour (Nickel Metal Hydride Battery) about 30 min (Alkaline Dry Battery) about 10 hour (External, IDX Endura10 Li-Ion Battery) * battery life will be changed according to the system situation.
Current Draw	2,000 mA
Dimensions	114 (W) x 194 (D) x 42 (H) mm, 1-1/2(W) x 7-11/16 (D) x 1-11/16 (H) inches
Weight	620 g / 1 lb 6 oz (excluding batteries)
Operation Temperature	+0 to +40 degrees Celsius, 41 to +104 degrees Fahrenheit
Accessories	Owner's Manual, AC Adaptor (PSB-1U), Conversion cable (AC Adaptor -- XLR 4-pin type connector), AC Power Cord, Battery Case (for AA type battery x 8), Battery Plate Holder, mount screw for Battery Plate Holder x 8, Ferrate Core x 8

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

Dimensions



Block Diagram



● The VC-50HD can pass the original time code and audio stream signals between HD/SD-SDI and IEEE1394.

Capture Video at Higher Bit rates with Version 2.0

- HDV/DV/MPEG-2 TS Video Recorder
- Supports MPEG-2 TS 2Mbps to 50Mbps
- Pre-Recording and Loop Recording
- Dedicated Utility Software can edit and convert video
- Network remote control function



Video Field Recorder

F-1 Ver.2

HDV DV MPEG-2 TS 2+2ch AUDIO USB 2.0 i.LINK

Highly durable removable 64GB SSD



Solid State Drive
F1-SSD64

Solution for V-Mount Battery



V-Mount Kit
F1-VMK1

Fully bi-directional, Universal, multi-format converter



HDV/DV, DVI-D/A and Component I/O. VC-300HD allows SD/HD-SDI I/O. Up/Down/Cross Conversion are possible. Also support for progressive formats and frame rates such as 24p.



Multi-Format Converter
VC-300HD Ver.2

HDV DV HD-SDI SD-SDI
DVI RGB COMPONENT

Multi-Format Converter
VC-200HD Ver.2

HDV DV DVI
RGB COMPONENT

Ensuring high quality while protecting the environment: Roland is ISO9001 and ISO14001 certified

At Roland, several group companies have obtained ISO9001 certification. In addition, in January 1999, Roland also received ISO14001 international environmental management system certification.

We're actively seeking ways to maintain harmony with the environment.

(ISO=International Standardization Organization: an organization for the promotion of standardization of international units and terms. They provide different categories of certification: ISO9001 Series certification is a product quality certification for products that undergo a certain level of quality control from the design stage to the after service stage; ISO14001 Series certification is for environment-related standards. Each member of the Roland Group is striving to obtain certification.)

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