



ADVC HD Family

HIGH-QUALITY HD VIDEO CONVERSION

Our ADVC® HD family supports virtually any high-definition (HD), video-conversion need. As standalone units or connected to a computer, all ADVC HD products feature broad compatibility with video equipment, sturdy construction, and a standalone-operation capability.



ADVC-HDM1 – Real-Time HD-SDI/ HDV Conversion

Provides high-quality, bi-directional conversion between HD-SDI and HDV signals, complete with embedded audio. It's perfect for recording from HD-SDI sources to our Turbo™ intelligent digital disc recorder (iDDR)—or for use as a standalone converter without a computer.

It can also encode HD MPEG-2 transport streams up to a full 1920x1080 resolution using one of eight different bit-rate settings that best suits your workflow.

The ADVC-HDM1 unit also lets you input external time-code information when encoding in HDV; control HD-SDI decks via HDV and vice versa with AV/C-RS-422 device control conversion; and use simple, two-button control for its encoding/decoding and time-code mode via the front panel. Convenient half-width, 19-inch rack, 1 RU form factor.

ADVC-HD50 – Real-Time HDMI to FireWire (IEEE1394) Conversion

Converts any uncompressed HDMI source—for example from AVCHD camcorders—to the HDV format for easier editing (1280 x 720 to 1280 x 720 HDV and 1920 x 1080 to 1440 x 1080 HDV), also reducing the need for a high-performance

system or costly HDD storage. Simple to operate—perfect for laptops *and* desktops—it can also be used as a live input for a MEDIAEDGE system.

ADVC-HDSC1 – Real-Time HD-SDI/SD-SDI to Component (YUV) Conversion

Converts HD-SDI signals to HD component output or SD-SDI signals to SD component output. It provides instant output of HD content to affordable HD component displays, such as TVs and RGB monitors—and standard-definition (SD) content to component, S-Video, and composite displays. It has a sync generator for HD (tri-level sync) and SD (black burst), making it ideal for video editing studios—as well as audio-level-adjustment options.

The ADVC-HDSC1 unit also offers several unique features, including embedded audio support, SD-SDI to S-Video and composite conversion, HD-SDI conversion to RGB for PC monitors with BNC inputs, and front-panel displays for video-format and audio-level outputs. As well, it automatically detects your current video output format, and supports SDI signal pass-through. Convenient half-width, 19-inch rack, 1 RU form factor.

KEY FEATURES

- Simple front-panel configuration and status display
- Compatible with Windows and Macintosh platforms
- No need to install drivers or any software applications
- 50 Hz and 60 Hz compatible
- Ideal for studio production environments
- Robust and reliable – over 250,000 ADVC converters sold worldwide

PACKAGE CONTENTS

ADVC-HDM1

- ADVCHDM1 converter unit
- AC adapter
- User manual
- 1 x FireWire cable (4-pin to 6-pin)



ADVC-HD50

- ADVC-HD50 unit
- User manual
- 1 x FireWire cable (6-pin to 6-pin)



ADVC-HDSC1

- ADVCHDSC1 unit
- AC adapter
- User manual



SPECIFICATIONS

ADVC-HDM1 Specifications

Digital Video

- 4-pin FireWire
- 6-pin FireWire

Supported MPEG-2 transport stream encoding formats:

- HDV (auto select)
 - HD1: 720/30p, 720/25p (video bit rate: 18.3 Mb/s; audio stream: stereo MPEG Audio Layer 2, 384 kb/s)
 - HD2: 1080/59.94i, 1080/50i (video bit rate: 25 Mb/s; audio stream: stereo MPEG Audio Layer 2, 384 kb/s)
- Additional formats (dip switch select)
 - Video bit rate: 11-, 14-, 16-, 18-, 20-, 25-, 30-, 40 Mb/s
 - Audio stream: MPEG Audio Layer 2, 384 kb/s

Supported MPEG-2 transport stream decoding formats:

- HDV (auto select)
 - HD1: 720/30p, 720/25p
 - HD2: 1080/59.94i, 1080/50i
- Additional formats (dip-switch select)
 - Profile/Level: MP @ HL, MP @ H14
 - Resolution/frame rate: 1080/59.94i, 1080/50i, 720/59.94p, 720/50p
- HD-SDI in (BNC)
- HD-SDI active-through (BNC)
- 2x HD-SDI out (BNC)

Digital Audio Input

- HDV 2-channel
- HD-SDI 2-channel embedded audio (SMPTE 299M Ch1, Ch2 only)

Digital Audio Output

- HDV 2-channel
- HD-SDI 2-channel embedded (SMPTE 299M stereo, 16 bit, 48 kHz, locked)

Time Code

- LTC in (BNC)
- LTC out (BNC)
- DVITC in (decoded from HD-SDI input)
- DVITC out (encoded in HD-SDI output)

Reference

- Input (BNC)
- Loop-through (BNC)

Device Control

- AV/C over 1394
- RS-422A (control)
- RS-422A (device)
- RS-232C (external control)

Display

- Front-panel status
- Mode select

Power

Includes DC adapter (12V, 2A)

Environmental Characteristics

- Operating temperature: 10 to 35°C
- Storage temperature: -20 to 60°C
- Maximum humidity: 80% (no condensation)

Dimensions

- Width: 215 mm (8.46 in.)
- Height: 44 mm (1.73 in.)
- Depth: 241 mm (9.49 in.)

ADVC-HD50 Specifications

Digital Video/Audio Input

1 x HDMI connector (HDCP not supported)

Digital Video/Audio Output

1 x 6-pin FireWire

Supported Video Input Resolutions

- 1920x1080 (59.94i, 50i), 1280x720 (59.94p, 50p)
- 720x480 (59.94p), 720x576 (50p), 640x480 (60p)

Supported Audio Input Formats

LPCM 2ch at 16-24 bit, 32/44.1/48 kHz

Video Output Formats

- HDV Mode-1 (720p): 1280x720/59.94p, 1280x720/50p
- HDV Mode-2 (1080i): 1440x1080/59.94i, 1440x1080/50i
- IEC61883-4 MPEG Transport Stream

Audio Output Format

Stereo MPEG-1 Audio Layer 2 384 kb/s (multiplexed)

Power Source

IEEE 1394 bus powered or DC 5V from optional AC adapter

Power Usage

8W

Environmental Characteristics

- Operating temperature: 5 to 40°C
- Storage temperature: -20 to 60°C
- Maximum humidity: 80% (no condensation)

Dimensions

- Width: 152 mm (5.98 in.)
- Height: 23 mm (0.91 in.)
- Depth: 153 mm (6.02 in.)

ADVC-HDSC1 Specifications

Digital Video

- SD-SDI/HD-SDI in (BNC)
- SD-SDI/HD-SDI active-through (BNC)

Supported Video Formats

- HD – 1080/60i, 1080/59.94i, 1080/50i, 1080/24PsF, 1080/23.38PsF, 1035/60i, 1035/59.94i, 720/60p, 720/59.94p, 720/50p
- SD – 525/59.94i (NTSC), 625/50i (PAL)

Digital Audio Input

SDI 8-channel embedded audio

Analog Video Output

- S-Video
- Composite (BNC)
- Composite (RCA)
- Component (5 x BNC; RGB; RGBH sync-on-green; RGBHV; Y,Pb,Pr)

Analog Audio Output

- Stereo unbalanced (2 x RCA)
- Ch1/2, Ch3/4, Ch5/6, Ch7/8, mix selectable

Reference

- SD black burst out (BNC)
- HD tri-level out (BNC)

Display

- LCD configuration menu
- Stereo audio peak meters
- -48 dB to 0 dB (FS) display
- -17 dB to 0 dB (FS) peak hold

Power

Includes DC adapter (12V, 3A)

Environmental Characteristics

- Operating temperature: 5 to 40°C
- Storage temperature: -20 to 60°C
- Maximum humidity: 80% (no condensation)

Dimensions

- Width: 215 mm (8.46 in.)
- Height: 44 mm (1.73 in.)
- Depth: 241 mm (9.49 in.)

HEADQUARTERS

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46 Quai A. Le Gallo
92648 Boulogne Cedex
FRANCE

DEALERS/RESELLERS

To find your local reseller or dealer for Thomson Grass Valley professional audio video products, please visit professional.grassvalley.com/sales/.

SERVICE & SUPPORT

Twelve-month limited warranty with service provided through local resellers. Additional support available on a contractual basis.