

ADVC HD FAMILY

HD Analog/Digital Video Conversion



Key Features

- Simple front-panel configuration and status display
- Solid construction in half-width, 19-inch rack, 1 RU form factor
- Supports 1080i and 720p HD formats
- NTSC and PAL compatible
- Ideal for studio production environments
- Broadcast-quality input and output

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.

ADVCHDSC1 – HD-SDI/SD-SDI-to-Component Conversion

Our ADVCHDSC1 unit 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 ADVCHDSC1 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.

ADVCHDM1 – Real-Time HD-SDI/HDV Conversion

Our ADVCHDM1 unit 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.

Compatible with Windows and Macintosh operating system-based nonlinear editors that support HDV or HD-SDI, the ADVCHDM1 unit lets you easily and instantly convert HD-SDI output to HDV and ingest HDV material into HD-SDI systems for archiving. 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 ADVCHDM1 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.



ADVCHDM1 Specifications

Video Format

- NTSC
- PAL

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%

Dimensions

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

Service and Support

1-year limited warranty

ADVCHDSC1 Specifications

Video Format

- NTSC
- PAL

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%

Dimensions

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

Service and Support

1-year limited warranty

Package Contents

ADVCHDSC1

- ADVCHDSC1 unit
- AC adapter
- User manual



ADVCHDM1

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



Grass Valley™ products from Thomson provide comprehensive, multi-format support for a wide range of professional video uses, from those in corporate media centers and educational institutions to those in concert and sports arenas, convention centers, and houses of worship.

These solutions include the ADVC line of analog-digital conversion products. Built on reliable and highly robust Canopus technology, they provide maximum performance and reliability for high-demand professional video production environments.

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