

## PURPOSE



## MVRD2200V

### Professional Realtime MPEG-1/MPEG-2 Encoding and Decoding

MVRD2200V stands alone as a professional high-quality MPEG-1 and MPEG-2 encoder with the ability to filter, stabilize and enhance analog source video prior to MPEG encoding. Powerful pre-filtering features in MVRD2200V include advanced 3D Y/C separation to reduce color noise and improve image quality, 3D digital noise reduction to eliminate noise in the analog video signal, a line time base corrector (LTBC) to correct any video images that jitter, as well as digital frame synchronization and auto gain controls.

#### MVRD2200V: Key Features

MVRD2200V is the successor to the Canopus Amber board and features additional analog video signal filtering, cleaning and stabilization technology. Supporting realtime, hardware-based MPEG encoding and software-based MPEG decoding, MVRD2200V also includes an updated SDK, providing full board function control and backwards-compatibility for Amber and MediaEdge SDK-based applications.

MVRD2200V supports both Main Profile at Main Level (MP@ML) MPEG-2 and I-frame-only encoding. When using MP@ML, the MVRD2200V delivers the high-quality video and audio MPEG-2 output required by today's video professionals. MP@ML features true IBP frame format, which provides the highest-quality video at the lowest bandwidth. In addition, MVRD2200V's variable bitrate capability (from 1Mbps to 15Mbps) is one of the most effective techniques used to maintain video quality while reducing file size. With composite and S-Video inputs, MVRD2200V is scalable up to full-D1 resolution with NTSC and PAL format support.

The software utilities included with MVRD2200V are MPEG Station, capture and playback application, and a DV AVI-to-MPEG file conversion utility. MPEG Station provides full resolution overlay for previewing footage during capture and features a detailed selection of encoding quality settings for users to adjust to meet their requirements.

MVRD2200V's software also features an Adobe® Premiere® Pro 1.x timeline export plug-in for fast, high-quality encoding directly from the timeline and an SDK for program developers to create custom software that may utilize the hardware for a specific task. Applications developed in the past with the MVRD2200V's predecessor, Amber, have included recording of medical procedures and security camera surveillance.

The realtime analog-to-MPEG capture capability of MVRD2200V also makes it an ideal companion to the Grass Valley MediaEdge system. When combined with MediaEdge, a LAN-based client/server video distribution system, MVRD2200V provides realtime MPEG encoding and live stream network broadcast of high-quality MPEG-2 video.

#### MVRD2200V: Specifications

##### Package Contents:

- MVRD2200V PCI bus card
- Installation CD-ROM
- User manual
- 2 x composite to S-Video (7-pin miniDIN) conversion cable

##### Technical Specifications:

###### Video Format

- NTSC: 720x480 @ 29.97fps
- PAL: 720x576 @ 25fps
- CCIR 601 to square pixel conversion

###### Analog Video Input

- 1 x S-Video (7-pin miniDIN) input

###### Capture Resolutions

- NTSC: 720x480, 352x480, 352x240
- PAL: 720x576, 352x576, 352x288

###### Video Compression

- MPEG-2 (ISO/IEC 13818-2)
- Main Profile @ Main Level (I,B,P / MP@ML)
- I-frame only support



##### Works with MediaEdge

- [MediaEdge Video Distribution System](#)

MediaEdge system sold separately.

##### Works with EDIUS

- [EDIUS Pro NLE software](#)



MVRD2200V supports high-speed, hardware-based MPEG export from the EDIUS Pro timeline.

EDIUS Pro software sold separately

- MPEG-1 (ISO/IEC 11172-2)

**Filtering**

- Input Adjustments (brightness, contrast, hue, saturation)
- 3D Y/C separation
- Digital 3D noise reduction
- Digital 3D frame synchronizer
- Digital line time base corrector

**Analog Audio Input**

- 1 x stereo (RCA)

**Audio Sampling Rates**

- 1 x 3.5mm stereo phono

**Audio Sampling Rates**

- 32kHz, 44.1kHz and 48kHz (all 16-bit)

**Audio Compression**

- ISO/IEC 11172-3 layer II (software compression)
- Uncompressed

**Audio Bitrate**

- 64, 96, 112, 128, 160, 192, 224, 256, 320 and 384kbps

**Multiplex**

- ISO/IEC 13818-2 MPEG-2 program stream
- ISO/IEC 11172-2 MPEG-1 system stream

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**Minimum System Requirements:**

- Intel® Celeron®, Intel Pentium® III, Intel Pentium 4 866MHz CPU or faster (multiprocessor systems and Hyper-threading technology supported)
- 128MB RAM
- Windows® 2000 Professional (requires Service Pack 4 or higher) , Windows® 2000 Server (requires Service Pack 4 or higher), Windows® XP Professional (requires Service Pack 1 or higher) or Windows® Server 2003
- 16 -bit graphics card capable of supporting hardware-based DirectDraw overlay at 640x480 resolution
- One free bus-mastering PCI slot (v2.1 or later)

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**Service and Support:**

- Limited warranty
  - Access to the Canopus Registered Users Web site at [www.canopus.com](http://www.canopus.com) when you register your product in an active Canopus User Account
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