


Cisco PS2000 4:2:0 MPEG-2 A/V Decoder and Cisco PS2005 4:2:2 MPEG-2 A/V Decoder



Cisco Video Networking Systems are the ultimate solution for customers who need to distribute reliable, high-quality video services over a digital broadband network.

The Cisco PS2000 4:2:0 MPEG-2 Audio/Video (A/V) Decoder and Cisco PS2005 4:2:2 MPEG-2 A/V Decoder are part of the VN 2900 Video Networking System—a high-density video encoder and decoder that receives audio and video streams, performs video processing, and adapts the streams to any standards-based digital broadband network.

The Cisco PS2000 and PS2005 Decoders provide real-time MPEG-1 and MPEG-2 audio and video decoding at a sustained data rate of up to 15 Mbps, which is ideal for video courier, monitoring, and surveillance applications.

The Cisco PS2000 and PS2005 Decoders receive multiplexed audio and video streams from the system network. The audio and video streams are demultiplexed and stored in separate audio and video buffers until they are ready to be decoded based on their timestamps. The data is buffered to account for network jitter and delay, with the amount of delay adjusted based on the amount of jitter and available memory. Audio and video streams undergo separate decompression and are sent to the appropriate outputs on the module.

The Cisco PS2000 and PS2005 Decoders output composite analog video and S-Video in both NTSC and PAL formats. The decoders also output analog stereo audio through RCA connectors. All outputs are accessible from the front panels of the modules.

The Cisco PS2000 and PS2005 Decoders have a Voltage Control Oscillator (VCXO) precision-variable clock that corrects jitter caused by network variable delays. This feature ensures that audio and video frames are not dropped or duplicated in the encoded stream and is essential for the high-quality demands of broadcast and multicast network environments.

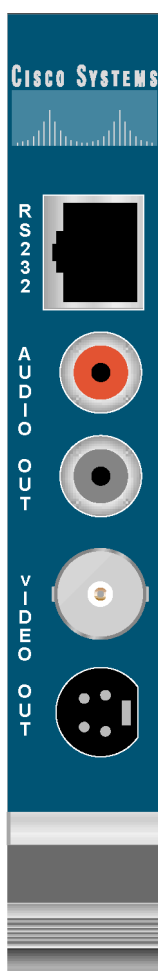
Table 1 is a summary of the Cisco PS2000 and PS2005 Decoder features and benefits.



Table 1 Cisco PS2000 and PS2005 Decoder Feature and Benefit Summary.

Feature	Benefit
MPEG-1 and MPEG-2 (4:2:0 MP@ML) decoding	High-quality audio and video decoding
3:2 inverse telecine support	Optimal compression for film
Closed captioning extraction	Superior retention of closed captioning information

Figure 1 Cisco PS2000 4:2:0 MPEG-2 A/V Decoder and Cisco PS2005 4:2:2 MPEG-2 A/V Decoder



Specifications

Video

Output

- Composite analog video (NTSC/PAL)
- S-Video

I/O Connectors

- BNC connector for composite video
- Mini-DIN connector for S-Video

Compression Standards

- Cisco PS2000: 4:2:0 MP@ML MPEG-2 (ISO-13818-2)
- Cisco PS2005: 4:2:2 MP@ML MPEG-2 (ISO-11172-2)
- MPEG-1

Data Rates

- Up to 15 Mbps

NTSC Resolutions Supported

- 720x480
- 704x480
- 544x480
- 480x480
- 352x480
- 352x240

PAL Resolutions Supported

- 720x576
- 704x576
- 544x576
- 480x576
- 352x576
- 352x288

Additional Features

- 3:2 inverse telecine support
- Closed captioning (NTSC VBI line 21)
- On-screen monitoring statistics
- Logo insertion
- Remote configuration through Cisco VN Unit Manager

Audio

Output

- Unbalanced stereo

I/O Connectors

- Two RCA connectors

Compression Standards

- MPEG-1 Layer 2

Data Rates

- 32 kbps to 441 kbps

Modes

- Mono, stereo, dual channel, joint stereo

Sampling Rates

- 48 kHz
- 44.1 kHz
- 32 kHz

Overall

- VCXO precision-variable clock
- Upgradable in-field Flash memory
- CompactPCI compatible



Corporate Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

European Headquarters
Cisco Systems Europe
11, Rue Camille Desmoulins
92782 Issy-les-Moulineaux
Cedex 9
France
www.cisco.com
Tel: 33 1 58 04 60 00
Fax: 33 1 58 04 61 00

Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7660
Fax: 408 527-0883

Asia Pacific Headquarters
Cisco Systems Australia, Pty., Ltd
Level 9, 80 Pacific Highway
P.O. Box 469
North Sydney
NSW 2060 Australia
www.cisco.com
Tel: +61 2 8448 7100
Fax: +61 2 9957 4350

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