Cisco 8398DVB MPEG-4 HD Digital Video Recorder

The Cisco® 8398DVB MPEG-4 High-Definition (HD) Digital Video Recorder (DVR) offers subscribers some of the latest enhancements in cable television viewing. It combines multiple compelling video services into one integrated unit. This multi-tuner DVR features MPEG-4 Part 10/H.264 SD/HD capability. It also features robust interactive capability (requires additional software) using a DOCSIS®-compliant cable modem that complies with the DOCSIS 2.0 specification. The Cisco 8398DVB provides consumers a rich home entertainment experience with HD picture clarity, the movie theatre experience of surround sound, personalized recording with DVR control, and the convenience of on-demand services such as Video-on-Demand.

The 8398DVB complies with DVB-C standards, MPEG-2 and MPEG-4 standards, and supports Phase Alternation by Line (PAL) video formats. The DVR's design also complies with required safety, emissions, and immunity specifications (adhering to the mandatory laws that may be applicable to Cisco). With its Smartcard reader, the Cisco 8398DVB supports renewable security.

Figure 1. Cisco 8398DVB MPEG-4 HD DVR (image may vary from actual product and specification)

Features

- *Multi-Format video decoder* capable of High Definition MPEG-2 and MPEG-AVC/H.264 decoding
- *Supports multiple picture formats* (576i, 576p, 720p, and 1080i) to allow optimum picture performance with both standard TVs and HDTVs
- *Internal 320 GB Hard Disk Drive* (Optional 160 GB or 500 GB)
- *Embedded DOCSIS 2.0-compliant* cable modem
- *HDMI™ connector* that connects an HDTV to the set-top and provides uncompressed digital video and audio in a simple, user-friendly connector
- *Digital audio output* to connect easily to high-end audio equipment
- *RCA outputs* to connect to standard definition TVs or VCRs
- *Two Ethernet ports*—one provides a high-speed data connection and the other one is reserved for future use
- *USB 2.0 port* for connectivity (See Note 2 on page 4)
- *PowerKEY® conditional access* to provide secure access to the digital signal

DVR Features

- *Dual-tuner DVR* allows one program to be recorded while you view another
- *Picture-in-Picture (PIP)* allows you to view two separate video sources simultaneously (See Note 3 on page 4)
- *320 GB Internal Hard Drive* stores hours of SD and HD content
- *USB 2.0 Connection* enables a host connection to peripheral devices such as navigation controllers, network adapters, and memory media readers (See Note 2 on page 4)

Figure 2. Cisco 8398DVB Front Panel (image may vary from actual product and specification)

Table 1. Front Panel Features

Feature	Description
Connections	USB 2.0 Host Port
Card Slots	ISO7816 Smartcard
Clock Display	6-digit, 7-segment green display
Controls	6 buttons: RECORD, VOL-, VOL+, CH-, CH+, ON/OFF
Indicators	4 LED indicators: cable modem connection, message, recording, power on/standby
Color	Black paint, black lens, black button, dark grey button text, white button text, white icons (cable modem connection, message), grey icon (recording)

Figure 3. Cisco 8398DVB Back Panel (image may vary from actual product and specification)

Table 2. Back Panel Features

Feature	Description
Connections In	Test connector (used for Cisco internal testing)
Connections Out	Cable In (75 Ohm female IEC connector), dual 10/100BASE-T Ethernet, HDMI, Analog Component (Y, Pb/Cb, Pr/Cr), S-Video, Composite Video, Dual Audio L/R, Sony/Philips Digital Interconnect Format (SPDIF) Digital Audio
Power Cord	Removable 1.5 m power cord
Power Switch	Rocker Type

Product Specifications

Table 3. Product Specifications

Specification	Value
Audio/Video	
Outputs	HDMI with High Bandwidth Digital Content Protection (HDCP)[1], Analog component (YPbPr), Dual Audio L/R outputs, USB 2.0 (Front Panel)[2], Dual 10/100BASE-T Ethernet ports, 75 Ohm IEC female type connector, S-Video, Digital audio output - Optical type
Tuning and Decoding	
DVR	Dual tuning, Dual Record, Pause, Rewind, Fast-Forward, Record one program while viewing another program, Software Controlled
Picture-in-Picture (PIP)	Digital, HD, Software Controlled[3]
Multi-Format Video Decoder	• The Cisco 8398 DVB provides optimum picture performance on both standard definition (SD) and high-definition (HD) TVs by supporting multiple picture formats: 576i, 576p, 720p or 1080i. • The Cisco 8398 DVB decodes and presents audio and video in both MPEG-2 and MPEG-4 Part 10 Formats and supports the following SD and HD Model Formats: ◦ SD Model Formats—MPEG-2 MP@ML; MPEG-4 Part 10 MP@ Level 3.0 and HP@ Level 3.0 ◦ HD Model Formats—MPEG-2 MP@ML and MP@HL; MPEG-4 Part 10 MP@ Level 3.0/4.0 and HP@Level 3.0/4.0.
Multi-Format Audio Decoder	Supported Audio Formats: • Digital audio MPEG-1 layer I/II • MPEG-2 layer II • MP3 • MPEG-4 AAC • AC3 Dolby™ Digital
Graphics Engine	High-resolution graphics up to 720 x 576 resolution
DOCSIS 2.0 Cable Modem	• The cable modem has a separate processor and dedicated memory from the set-top processor and memory to achieve optimum performance without impacting set-top functions • IP-based, real-time, two-way communications between the set-top and the headend
Memory/Storage	
RAM	• 64 MB DDR RAM (for system and applications) • 64 MB DDR RAM (for video decoding)
Flash	8 MB (base model of the product)
Hard Drive	320 GB (Optional Drives: 160 GB or 500 GB)
Processors	
Application/CPU	300 MHz CPU (32-bit RISC Processor)
Data Transmission and Tuner	
QAM 64 and 256 ITU J.83 Annex A Support	DVB-C (EN 300 429) compliant for QAM delivery and demodulation
Conditional Access and Security/Operation System/Application	
Smartcard	ISO7816 Smartcard reader for renewable security
Conditional Access System	• Compliant with DVB (ETR 289) Common Scrambling Algorithm • Uses PowerKEY for conditional access
CGMS-A and Rovi™ Copy Protection	• Allows cable service providers to add another layer of copy protection software designed to restrict unauthorized subscribers from making analog copies of digital transmissions • Rovi requires a separate agreement between the cable operator and Rovi Corporation
Power Supply	
Power Supply	Internal 100 – 240 VAC 50/60 Hz power supply with attached plug
Dimensions	
Product (HxWxD)	Approximately 16.3 in. x 9.6 in. x 1.8 in (415 mm x 245 mm x 45 mm)

Ordering Information

Table 4. Ordering Information

Model	Description	Part Number
Cisco 8398DVB Set-Top	8398DVB HDC, HD MPEG-4/-2 DVR with 320 GB HDD, 128 MB RAM, DOCSIS 2.0, Ethernet and PowerKEY module **In Carton:** Power Cord, User Guide, Safety Sheet, HDMI Cable	4031620

Notes:

1. HDMI combined with HDCP provides optimal, secure connection to an HDTV with HDMI and an HDCP interface.
2. The USB 2.0 high-speed data port provides a 480 Mbps output for connection to devices such as external hard drives. USB support requires additional middleware and application support.
3. Based on the channel you select, PIP may not be available.

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