

Cisco 8455DVB MPEG-4 HD Digital Video Recorder

The Cisco® 8455DVB 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, and robust interactive capability using the DOCSIS® 2.0 compliant cable modem. The Cisco 8455DVB is designed to provide consumers a rich home entertainment experience with HD picture clarity, movie theatre experience of surround sound, personalized recording with Personal Video Recording control, and the convenience of on-demand services such as Video-On-Demand.

The 8455DVB is compliant with DVB-C standards, MPEG-2 and MPEG-4 standards, supports PAL video formats, and is designed to be compliant with the required safety, emissions, and immunity specifications (as per the mandatory laws that may be applicable to Cisco). With its SmartCARD reader, it is built to support renewable security.

Figure 1. Cisco 8455DVB HD MPEG-4 DVR (image may vary from actual product and specification)



Features

- Multi-Format video decoder capable of High Definition MPEG-2, MPEG-AVC / H.264 / VC-1 decoding
- Supports multiple picture formats (576i, 576p, 720p, and 1080i) to allow optimum picture performance with both standard TVs and HDTVs
- Internal 160 GB Hard Disk Drive
- Embedded DOCSIS 2.0 compliant cable modem
- Connect an HDTV to the set-top through the HDMI™ connector
- Digital audio output to connect easily to high-end audio equipment
- SCART outputs to connect to standard definition TVs or VCRs
- Ethernet port for connection to video source or connected home residential gateway
- USB 2.0 port for connectivity

Figure 2. Cisco 8455DVB HD MPEG-4 DVR Front Panel (image may vary from actual product and specification)



Table 1. Front Panel Features

Feature	Description
Controls	13 keys: ON/STANDBY, CH-, CH+, VOL-, VOL+, Record, Guide, TV and Navigation (5 keys)
Clock Display	5-digit, 7-segment, green VFD display
Indicators	1 LED (Power on/standby) 5 icon based indicators in the VFD display
Other	ISO7816 Smartcard

Figure 3. Cisco 8455DVB HD MPEG-4 DVR Back Panel (image may vary from actual product and specification)



Table 2. Back Panel Features

Feature	Description
Connections In	Cable In (75 Ohm female IEC connector)
Connections Out	RF Bypass (75 Ohm male IEC connector) HDMI Analog Component (YPbPr) Dual SCART Audio L/R Out SPDIF Digital Audio Output USB 2.0 port
Data Connections	1 x 10/100 Ethernet Output (Cable Modem) 1 x 10/100 Ethernet Output (In-Home Video Distribution)
Power Cord	1.5m power cord

Product Specifications

Table 3. Product Specifications

Specification	Value
Audio/Video Outputs	
Inputs and Outputs	<ul style="list-style-type: none"> • 75 Ohm female IEC connector RF input • 75 Ohm male IEC connector RF bypass output • HDMI 1.2 output • Analog component (YPbPr) outputs • TV SCART output • VCR SCART output • Audio L/R outputs • Digital audio output - Optical type • 2 x 10/100BASE-T Ethernet ports • USB 2.0
HDMI 1.2 Output with HDCP Copy Protection	<ul style="list-style-type: none"> • High-Definition Multimedia Interface (HDMI) provides uncompressed digital video and audio in a simple, user-friendly connector • HDMI combined with HDCP (High Bandwidth Digital Content Protection) is designed to provide the optimal, secure connection to an HDTV set that supports the HDMI with HDCP interface
USB 2.0 High-Speed Data Output	Provides a 480 Mbps output for connection to devices such as external hard drives* *USB support requires middleware and application support for functionality
Tuning and Decoding	
Multi-Format Video Decoder	<ul style="list-style-type: none"> • Allows decoding and presentation of audio and video in both MPEG-2 and MPEG-4 part 10 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 • Supports multiple picture formats (576i, 576p, 720p, or 1080i) to allow optimum picture performance with both standard TVs and HDTVs
Multi-Format Audio Decoder	Enables tuning of digital audio MPEG-1 layer I/II, MP3, MPEG-2 layer II, AC3 Dolby™ Digital; MPEG-4 AAC audio formats
Independent DOCSIS 2.0 Cable Modem with 200 MHz Processor	<ul style="list-style-type: none"> • Allows IP-based, real-time, two-way communications between the set-top and the headend • 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
10/100 Ethernet	Ethernet port can provide high-speed cable modem data service when connected to a PC
Powerful Graphics Engine	Enables high-resolution graphics up to 720 x 576
Memory/Storage	
DVR with 160 GB Hard Drive	<ul style="list-style-type: none"> • The 160 GB hard drive is designed to allow up to 80 hours* of SD programs to be recorded and stored using DVR functions • Gives subscribers complete control over watching, pausing, rewinding, replaying, and fast forwarding live programs using the remote control <p>*The total program hours that can be stored depends upon the format and data rate of the programming source</p>
Memory Configuration	Base model contains: <ul style="list-style-type: none"> • 16 MB Flash memory • 32 MB DDR RAM for video decoding • 128 MB DDR RAM for system and applications • 32 KB EEPROM
Processor	
Powerful 32-bit RISC Processor	Fast CPU (266 MHz) delivers quick tuning changes and on-screen response times
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

RF Output with RF Loop-Through	The RF loop-through function allows the analog channels to bypass directly to the TV
Conditional Access and Security/Operation System/Application	
SmartCARD	ISO7816 SmartCARD reader for renewable security
Conditional Access System	<ul style="list-style-type: none"> • Compliant with DVB (ETR 289) Common Scrambling Algorithm • Supports 3rd-party conditional access systems including Irdeto, MediaGuard and NAGRA
Macrovision® Copy Protection (Optional; requires a separate agreement between the cable operator and Macrovision Corp.)	Allows cable service providers to add another layer of copy protection software, called Macrovision, designed to restrict unauthorized subscribers from making analog copies of digital transmissions
Power Supply	
Power Supply	Internal 185 – 265 VAC 50/60 Hz power supply
Dimensions	
Product (WxDxH)	Approximately 360 mm x 257 mm x 60 mm (9.1 in. x 10.1 in. x 2.4 in.)

With respect to each AVC/H.264 product, we are obligated to provide the following notice:

AVC VIDEO LICENSE

THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE <http://www.mpegla.com>.

Accordingly, please be advised that service providers, content providers, and broadcasters are required to obtain a separate use license from MPEG LA prior to any use of AVC/H.264 encoders and/or decoders.

MACROVISION COPYRIGHT NOTICE

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.



Cisco, Cisco Systems, the Cisco logo, the Cisco Systems logo, and Scientific Atlanta are registered trademarks or trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and certain other countries.

DOCSIS is a registered trademark of Cable Television Laboratories, Inc.

Dolby is a trademark of Dolby Laboratories.

DVB Digital Video Broadcasting is a registered trademark of the DVB project.

HDMI, the HDMI logo, and High Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

Macrovision is a registered trademark of Macrovision Corporation.

All other trademarks mentioned in this document are the property of their respective owners.

Specifications and product availability are subject to change without notice.

© 2008 Cisco Systems, Inc. All rights reserved.

Service Provider Video Technology Group
1-800-722-2009 or 678-277-1120
www.scientificatlanta.com

Part Number 7014683 Rev A
October 2008