Cisco Z880DVB and Z870DVB MPEG-2 SD Digital Video Recorders

The Cisco® Z880DVB and Z870DVB MPEG-2 SD Digital Video Recorders (DVRs) are designed to offer an affordable solution for viewing and recording standard definition (SD) broadcast digital audio and video services. These DVRs combine some of the latest DVR technology with the ability to offer robust interactive services, such as Video-On-Demand (VOD) [requires additional software] when configured with the optional DOCSIS® 2.0 cable modem contained in the Z880DVB model. Alternatively, a connection can be made to an external modem (cable or DSL) to provide the return path for these interactive services. The Cisco Z880DVB and Z870DVB DVRs help enable network operators to expand their channel lineup, recapture valuable spectrum, and offer an Electronic Program Guide (EPG) to simplify recording without typically requiring an upgrade to their existing facility. In addition, consumers can record and later watch up to 90 hours of personally-selected programming content. Recording can either be activated instantly with a single button press of the remote control or scheduled in advance using the EPG.

The Cisco Z880DVB and Z870DVB DVRs comply with DVB-C standards and MPEG-2 standards, support PAL video formats, and will be designed in compliance with the appropriate safety, emissions, and immunity specifications (as per the mandatory laws that may be applicable to Cisco). With their SIM card reader, these DVRs support renewable security.

Figure 1. Cisco Z880DVB SD MPEG-2 DVR (image may vary from actual product and specification)

Features

Navigator, EPG, and Setup Menus (with Cisco application)

- Record one program while watching another
- Ability to pause, fast-forward, rewind, and record live TV
- Enable display of program information in a channel grid format
- Use composite output to connect easily to TVs
- Use analog component (YPbPr) to connect to higher-end TVs
- Use the digital audio output to connect easily to high-end audio equipment
- Provide channel navigation and information about the current program and the upcoming program
- Include parental control and favorite channels selection
- Support reservation PPV

- Include easy-to-use guides and user menus for an enjoyable user experience

- Provide an English user interface

Figure 2. Cisco Z880DVB SD MPEG-2 DVR Front Panel (image may vary from actual product and specification)

Table 1. Front Panel Features

Feature	Description
Controls	6 buttons: CH-, CH+, VOL-, VOL+, RECORD, POWER; IR Receiver
Clock Display (Optional)	4-digit, 7-segment green display
Other	USB 2.0 Port
	LED Indicators for Power on/standby, cable modem connection, and recording

Figure 3. Cisco Z880DVB SD MPEG-2 DVR Back Panel (image may vary from actual product and specification)

Table 2. Back Panel Features

Feature	Description
Connections In	Cable In (75 Ohm threaded F connector), SIM card reader
Connections Out	TV Out (75 Ohm threaded F connector), Composite Video Out, Component Output (YPbPr), Dual L/R Audio Out, SPDIF Digital Audio Output, Ethernet
Powering	Attached 1.5 M 90–270 VAC, 50/60 Hz power cord

Product Specifications

Table 3.   Product Specifications

Specification	Value
Audio/Video Outputs	
Inputs and Outputs	• 75 Ohm threaded F connector RF input • Threaded F connector RF output for RF bypass • Dual audio L/R • Audio L/R outputs • Component output (YPbPr) • SPDIF Digital audio output (RCA type) • 10/100 Ethernet output
USB 2.0 High-Speed Data Output	Provides a 480 Mbps output for connection to devices such as memory sticks* *USB support requires middleware and application support for functionality*
Tuning and Decoding	
Multi-Format Video Decoder	• Allows decoding and presentation of audio and video in MPEG-2 • SD Formats: MPEG-2 SP@ML, MP@LL and MP@ML • Supports PAL picture format of 720 x 576 • Dual SD MPEG-2 decode to allow capabilities such as picture-in-picture (PIP)
Multi-Format Audio Decoder	Enables tuning of digital audio MPEG-1 layer I/II, MP3, AC3 Dolby® Digital audio formats. Dolby Pro-Logic® compatible output
Optional DOCSIS 2.0 Cable Modem with 200 MHz Processor (Z880 Model only)	• 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 Output	Allows connection to an external cable modem to allow interactive services like VOD or, if configured with the optional internal cable modem, the Ethernet port provides high-speed cable modem data that can be connected to a PC
Powerful Graphics Engine	Enables high-resolution graphics up to 720 x 576
Memory/Storage	
DVR with 160 GB Hard Drive	The 160 GB hard drive allows up to 90 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 *The total program hours that can be stored depends upon the format and data rate of the programming source.*
Configurable Memory Sizes	Base model contains: • 8 MB flash memory • 64 MB DDR RAM • 32 KB EEPROM
Processor	
Powerful 32-bit RISC Processor	Fast CPU 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	When the set-top is in standby mode, the RF loop-through function allows the analog channels to bypass directly to the TV
Conditional Access and Security/Operation System/Application	
Internal Secure Microprocessor (PowerKEY® model)	Provides hardware-assisted conditional access functions within a tamper-resistant package
SIM Card Reader	Supports the ability to upgrade the native PowerKEY security
PowerKEY Conditional Access System	• Secures digital services using an RSA encryption algorithm that mathematically matches pairs of keys • Compliant with DVB® (ETR 289) Common Scrambling Algorithm
Hard Disk Drive Security	All recordings securely encrypted using internal secure microprocessor

DVR, Navigator, Electronic Program Guide (EPG), Pay-Per-View (PPV), and Setup Menus	• DVR allows recording of programs onto an internal hard disk drive and ability to pause, fast-forward, and rewind live television
	• Enables display of program information in a two-hour by five-channel grid format
	• Provides channel navigation and information about the current program and following program
	• Includes parental control and selection of favorite channels
	• Reservation PPV support using mobile SMS or telephone identification authorization
	• Includes installation and user settings menus
	• English language support
Power Supply	
Power Supply	Internal 90–270 VAC 50/60 Hz power supply with attached plug
Dimensions	
Product (WxDxH)	Approximately 385 mm x 210 mm x 45 mm (15.2 in. x 8.3 in. x 1.8 in.)