

Cisco Explorer 4742HDC High-Definition Set-Top with Multi-Stream CableCARD Interface

Power, flexibility, and advanced security features highlight the Cisco® Explorer® 4742HDC High-Definition Set-Top with Multi-Stream CableCARD™ (M-Card™) interface. Additionally, the 4742HDC set-tops support Multimedia over Coax Alliance (MoCA™) technology. With MOCA, subscribers can use their cable wiring for LAN connections.

The 4742HDC set-top supports the tru2way™ (formerly OCAP™) and Federal Communications Commission (FCC) mandates for separable security. The set-tops also offer MPEG-4 (H.264) high definition (HD) and standard definition (SD) decoding with HD and SD outputs and DOCSIS® 2.0 data capability.

The 4742HDC has earned the ENERGY STAR®¹.

Figure 1. Cisco Explorer 4742HDC Front Panel (image may vary from actual product and specification)



Features

Network Utilization Enhancements

- **1 GHz Tuning** enables cable operators to expand network bandwidth to provide additional services such as VOD, tru2way, DOCSIS 2.0, and high-speed data
- **MPEG-4 (H.264) Decoding** supports compression technology that provides better video quality at approximately half the data rate of MPEG-2
- **DOCSIS 2.0** provides greatly increased upstream throughput for future advanced services and provides a path for future IP video services (optional software)

OpenCable™ and Conventional Network Support

- **M-Card Interface** uses a Multi-Stream CableCARD (M-Card) for separable security
- **Axiom Middleware** supports tru2way applications such as Service Navigators, Games, and other future tru2way applications (optional software)
- **DSG (DOCSIS Set-top Gateway)** provides a powerful standard transport mechanism for command and control signaling between the set-top and service provider network (optional software)
- **DAVIC Receiver/Transmitter** allows IP-based, real-time, two-way communication between the set-top and the service provider network on-demand services (optional software)

Advanced User Interface Capabilities

- 3D Graphics acceleration with Open GL IS 2.0 support (optional software)

Home Networking Features

- **USB 2.0 Connection** enables a host connection to peripheral devices such as navigation controllers, network adapters, and memory media readers
- **MoCA Connection** enables an IP LAN connection over coax cable, which minimizes the need for new wiring in the home
- **Ethernet Connection** enables a connection to the home IP LAN for advanced services such as content sharing to the set-top from retail-purchased electronic devices

Figure 2. Cisco Explorer 4742HDC Front Panel (image may vary from actual product and specification)



Table 1. Front Panel

Feature	Description
Controls	IR receiver, Power
Connections	USB 2.0 host, software controlled
Indicators	Four 7-segment LED digits, Power icon, Message icon, HDTV, 5.1, Auto, 1080i/p, 720i/p, 480i/p
Color	Black, grey text
Branding	Cisco, model number, provision for customer brand

Figure 3. Cisco Explorer 4742HDC Back Panel (Image may vary from actual product and specification)



Table 2. Back Panel

Feature	Description
Connections In	Cable In with MoCA
Connections-Interactive	USB 2.0 Host, RJ-45 Ethernet, software controlled
Connections Out	HDMI™ with CEC, IEEE 1394 (4-pin), Dual L/R Audio, Baseband Video, YPbPr, IR, Optical Digital Audio, RF Out
Output Resolutions	720 x 480i 60 Hz, 1920 x 1080i 60 Hz, 1920 x 1080p 30 Hz, 1920 x 1080p 24 Hz, 1280 x 720p 60 Hz, 720 x 480p 60 Hz, 720 x 480i 60 Hz, software controlled
Output Control	Scaled video in graphics, scaled HD video in graphics, graphics on HD and SD outputs, aspect ratio control, native resolution pass-thru, HD down convertible to SD, software controlled
Labels	Serial Number, eCM MAC Address, M-Card Serial Number, M-Card MAC Address, RF MAC Address, tamper-proof CableCARD (green)

Product Specifications

Table 3. Product Specifications

Specification	Value
Tuning and Decoding	
Tuning	QAM 64 or 256, In-Band 54 MHz-1 GHz, A/V in display, QPSK out-of-band (OOB) 70-130 MHz, DOCSIS 91-867 MHz, MoCA 1.0-1.5 GHz
Video Decoders	Dedicated 400 MHz VLIW CPU Processor, MPEG-4 (H.264) up to HP@L4.0 (HD), VC1 AP@L2&3, MPEG-2 up to MP@HL, 1920 x 1080i 60 Hz, 1920 x 1080p 30 Hz, 1920 x 1080p 24 Hz, 1280 x 720p 60 Hz, 720 x 480p 60 Hz, video scaling, software controlled
Audio Decoders	Dolby™ Digital to 5.1, MPEG-1 and MPEG-2, Dolby Digital+, AAC, AAC+, AC3, MP3
Conditional Access	Separable security with M-Card
Graphics Engine	Arm Mali 200 3 Dimension graphics processor, up to 1920 x 1080 resolution, 32 bit (16 million) color, OpenGL ES2.0-compatible, software controlled
DAVIC	FDC (Forward Data Channel) 1.54 Mbps QPSK, RDC (Reverse Data Channel) 1.54 Mbps QPSK, FAT QAM Channel Downstream, software controlled
DOCSIS	OOB and interaction via DOCSIS 2.0, DOCSIS Set-top Gateway, Baseline Privacy Interface, software controlled OPTIONAL: 3dB DOCSIS upstream power boost
Memory/Storage	
RAM	Minimum of 512 MB
Flash	Minimum of 128 MB
NVM	Minimum of 16 KB
Processors	
Application/CPU	792 MHz (1200 DMIPS)
DOCSIS	333 MHz CPU
Network	400 MHz CPU
Dimensions	
Product (HxWxD)	2.0 in. x 11.2 in. x 9 in. (5.1 cm x 28.5 cm x 22.9 cm)
Product Weight	3.5 lbs (1.6 Kg)
Carton (HxWxD)	Carton of 5 units = 14.25 in. x 10.6 in. x 12.6 in. (36.2 cm x 26.9 cm x 32.0 cm)
Total Weight	Carton of 5 units = 17.6 lbs (8 Kg)
Environment Specifications	
Placement	Locate with at least 2 inches of open space above and on each side
Room Temperature	32° to 105°F (0° to 40°C) during operation
Storage Temperature	14° to 158°F (-10° to 70°C)
Power Dissipation	50W maximum peak, ENERGY STAR (Version 3, 2011)

Table 4. Accessories

Specification	Value
In Carton	
	Power Cord, Quick Reference Guide
Sold Separately	
	License, Axiom OCAP (tru2way) Middleware, non-DVR, see Note 2
	MultiStream CableCARD PKM803 (Multiples of 200)
	AllTouch® AT8650 Remote Control
	RGB Adapter and Cables
	Part Number
	4026954
	4033273
	4016237
	749790 is EOL

Specification	Value	
	IR Extender - 12 ft (3.65 m)	1004648
	USB IR Extender - 12 ft (3.65 m)	1001807 is EOL
	USB IR Extender - 25 ft (7.32 m)	4006725 is EOL
	HDMI-to-HDMI Cable	1002048

Ordering Information

Table 5. Ordering Information

Model	Description	Part Number Set-Top with M-Card Module
Cisco Explorer 4742HDC	Explorer 4742HDC Digital-Only High-Definition Interactive Set-Top with PowerKEY Multi-Stream CableCARD (with 512 MB)	4038087
Cisco Explorer 4742HDC	Explorer 4742HDC Digital-Only High-Definition Interactive Set-Top, 3dB DOCSIS Boost, with PowerKEY Multi-Stream CableCARD Interface (with 512 MB)	4041520
Cisco Explorer 4742HDC	Explorer 4742HDC Digital-Only High-Definition Interactive Set-Top, 3dB DOCSIS Boost, with Cox Customer Specific Multi-Stream CableCARD (with 512 MB)	4040016

Notes:

1. Set-top boxes that earn the ENERGY STAR reduce greenhouse gas emissions by meeting strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy. ENERGY STAR is a registered mark owned by the U.S. government.

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