Cisco Explorer 1540C and 1542C Digital-Only Interactive Set-Tops with Multi-Stream CableCARD Interface

Power, flexibility, and advanced security features highlight the Cisco® Explorer® 1540C and 1542C Digital-Only Interactive Set Tops with Multi-Stream CableCARD™ (M-Card™) interface. Additionally, the 1542C supports MoCA™ (Multimedia over Coax Alliance), which lets subscribers use their cable wiring for LAN connections.

Both set-tops support tru2way™ (formerly OCAP™) and separable security. Both set-tops also offer MPEG-4 (H.264) standard definition (SD) and high definition (HD) decoding with SD outputs and DOCSIS® 2.0 data capability.

Figure 1.   1540C Front Panel (1542C Front Panel is similar; image may vary from actual product and specification)

Features

Network Utilization Enhancements

- *1 GHz Tuning* lets cable operators expand network bandwidth to provide additional services such as VOD, tru2way, DOCSIS 2.0, and high speed data
- *MPEG-4 (H.264) Decoding* supports MPEG-4 compression technology, which 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 OpenCable applications such as Service Navigators, Games, and future applications (optional)
- *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)
- *DAVIC Receiver/Transmitter* allows IP-based, real-time, two-way communication between the set-top and service provider network for on-demand services (optional)

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 (1542C)

Figure 2. 1540C Front Panel (1542C Front Panel is similar; image may vary from actual product and specification)

Table 1. Front Panel Features

Feature	Description
Connections	USB 2.0 Host, software controlled
Controls	IR Receiver, Power
Indicators	Power (1540C) Power, Record (1542C)
Color	Black, white text
Branding	Cisco, model number

Figure 3. 1540C Back Panel (1542C Back Panel is similar; image may vary from actual product and specification)

Table 2. Back Panel Connectors

Feature	Description
Connections In	• Cable In (1540C) • Cable In with MoCA (1542C)
Connections Out	Cable Out, L/R Audio Out, Video Out, IR, Optical Audio, S-Video
Output Resolutions	720 x 480i 60 Hz, software controlled
Connections-Interactive	• Cable In, software controlled (1540C) • Cable In with MoCA, software controlled (1542C)
Power Input	External DC Power
Labels	Serial Number, eCM MAC Address, M-Card Serial Number, M-Card MAC Address, RF MAC Address

Specifications

Table 3. Product Specifications

Specification	Value
Tuning and Decoding	
Tuning	QAM 64 or 256, In-Band 54 MHz–1 GHz, QPSK out-of-band (OOB) 70–130 MHz, DOCSIS 91–867 MHz, MoCA 1.0-1.5 GHz, A/V in display
Video Decoders	MPEG-2 MP@ML, MP@HL (SD, 720 x 480i), MPEG-4 (H.264) up to HP@L4.0 (HD), VC1, Video Scaling
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	16 million colors, 720 x 480 resolution, simultaneous scale MPEG-2 video
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
Memory/Storage	
RAM	Minimum of 128 MB
Flash	Minimum of 32 MB
NVM	16 KB
Processors	
Application/CPU	700 MHz (approximately 1000 dMIPs)
DOCSIS	200 MHz CPU
Dimensions	
Product (HxWxD)	1.76 in. x 11.8 in. x 7.38 in. (4.5 cm x 30 cm x 18.7 cm)
Product Weight	2.0 lbs (0.9 kg)
Carton (HxWxD) (5 units per carton)	12.625 in. x 10.625 in. x 13.25 in. (32.1 cm x 27. cm x 33.7 cm)
Total Weight (5 units per carton)	19.4 lbs (8.8 kg)
Environment Specifications	
Placement	Locate with at least 2 inches of open space above and on each side
Room Temperature	32º to 105ºF (0º to 40ºC) during operation
Storage Temperature	14º to 158ºF (-10º to 70ºC)

Table 4. Accessories

Specification	Value	Part Number
In Carton		
	Set-Top Power Supply, Quick Reference Guide	
Sold Separately		**Part Number**
	License, Axiom OCAP (tru2way) Middleware, non-DVR	4026954
	SARA Software License	4020466
	AT8560 AllTouch® Universal Remote Control	4016237
	IR Extender—12 ft (3.65 m)	1004648
	USB IR Extender—12 ft (3.65 m)	1001807
	USB IR Extender—25 ft (7.32 m)	4006725
	30 Watt Set-Top Power Supply, Model PS001	4019611
	MoCA Point of Entry Filter	4023444

Ordering Information

Table 5.   Ordering Information

Model	Description	Part Number Set-Top with PowerKEY® M-Card Module
Cisco Explorer 1540C	Cisco Explorer 1540C Digital-Only Interactive Set-Top with PowerKEY M-Card Interface	4023147
Cisco Explorer 1542C	Cisco Explorer 1542C Digital-Only Interactive Set-Top with PowerKEY M-Card Interface and MoCA	4027414

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