

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 | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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 | 32° to 105°F (0° to 40°C) during operation |
| Storage Temperature | 14° to 158°F (-10° to 70°C) |

Table 4. Accessories

| Specification | Value | |
|------------------------|---|---------|
| 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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