

## Cisco Explorer 1540 Digital-Only Interactive Set-Top

Power, flexibility, and advanced security features highlight the Cisco® Explorer® 1540 Digital-Only Interactive Set Top (set-top).

The Cisco 1540 set-top supports the CableLabs® tru2way™ (formerly OCAP™) platform. Additionally, the set-top offers MPEG-4 (H.264) standard definition (SD) and high definition (HD) decoding with SD outputs and DOCSIS® 2.0 data capability.

**Figure 1.** Explorer 1540 Front Panel (Image may vary from actual product and specification.)



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### 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

- *Axiom™ Middleware* supports tru2way applications such as Service Navigators, Games, and future 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 for services such as on-demand service (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
- *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. Explorer 1540 Front Panel (Image may vary from actual product and specification.)



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Table 1. Front Panel Features

| Feature     | Description                                                  |
|-------------|--------------------------------------------------------------|
| Connections | USB 2.0 Host, software controlled                            |
| Controls    | IR Receiver, Power                                           |
| Indicators  | Power                                                        |
| Color       | Black, white text                                            |
| Branding    | Cisco, model number, provision for service provider branding |

Figure 3. Explorer 1540 Back Panel (Image may vary from actual product and specification.)



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Table 2. Back Panel Connectors

| Feature                 | Description                                                              |
|-------------------------|--------------------------------------------------------------------------|
| Connections In          | Cable In                                                                 |
| Connections Out         | Cable Out, L/R Audio, Baseband Video, IR, Optical Audio Out, and S-Video |
| Output Resolutions      | 720 x 480i 60 Hz, software controlled                                    |
| Connections-Interactive | Cable In                                                                 |
| Power Input             | External DC Power                                                        |
| Labels                  | Serial Number, RF MAC Address, eCM MAC Address                           |

## Specifications

**Table 3.** Product Specifications

| Specification                     | Value                                                                                                                                 |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tuning and Decoding</b>        |                                                                                                                                       |
| Tuning                            | QAM 64 or 256, In-Band 54 MHz–1 GHz, QPSK out-of-band (OOB) 70–130 MHz, DOCSIS 91–867 MHz, A/V in display                             |
| Video Decoders                    | MPEG-2 MP@ML, MP@HL (SD, 720 x 480i), MPEG-4 (HP@L3, HP@L4), VC1, Video Scaling                                                       |
| Audio Decoders                    | Dolby™ Digital to 5.1, MPEG-1 and MPEG-2, Dolby Digital+, AAC, AAC+, AC3, MP3                                                         |
| Conditional Access                | Embedded PowerKEY®                                                                                                                    |
| Graphics Engine                   | 65,000 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                           |
| <b>Memory/Storage</b>             |                                                                                                                                       |
| DDR 2                             | ≤ 256 MB                                                                                                                              |
| Serial Boot Flash                 | 2 MB                                                                                                                                  |
| NAND Flash                        | ≤ 256 MB                                                                                                                              |
| EEPROM Memory NVM                 | 16 KB                                                                                                                                 |
| <b>Processors</b>                 |                                                                                                                                       |
| Application/CPU                   | 700 MHz (approximately 1000 dMIPs)                                                                                                    |
| DOCSIS                            | 200 MHz CPU                                                                                                                           |
| <b>Dimensions</b>                 |                                                                                                                                       |
| 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)                    | 12.625 in. x 10.625 in. x 13.25 in. (32.1 cm x 27.0 cm x 33.7 cm)                                                                     |
| Total Weight                      | 19.4 lbs (8.8 kg)                                                                                                                     |
| <b>Environment Specifications</b> |                                                                                                                                       |
| 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       |                                           |             |
|                 | Power Cord, Quick Reference Guide         |             |
| Sold Separately |                                           | Part Number |
|                 | Axiom tru2way Middleware License          | 4014594     |
|                 | SARA Software License                     | 4020466     |
|                 | AT8560 AllTouch® Universal Remote Control | 4016237     |
|                 | RGB Adapter and Cables                    | 749790      |
|                 | IR Extender—12 ft                         | 1001807     |
|                 | IR Extender—25 ft                         | 4006725     |

## Ordering Information

**Table 5.** Ordering Information

| Model         | Description                                                                                      | Part Number Set-Top |
|---------------|--------------------------------------------------------------------------------------------------|---------------------|
| Explorer 1540 | Explorer 1540 Digital-Only Interactive Set-Top with 32 MB of Flash and 128 MB Application Memory | 4023145             |

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