



Product Overview

This chapter provides physical and functional overviews of the Cisco DVB CAR100 and contains the following sections:

- Product Features:
 - All Versions of the Cisco DVB CAR100
 - Additional Features of the Cisco DVB CAR100-LAN
- Network Overview:
 - Cisco DVB CAR100-PC Version
 - Cisco DVB CAR100-LAN Version
- Physical Description

Product Features

All Versions of the Cisco DVB CAR100

Two versions of the Cisco DVB CAR100 are available—the Cisco DVB CAR100-PC version that connects a single computer to the CATV network, and the Cisco DVB CAR100-LAN version that can connect up to 20 computers to the CATV network via an Ethernet hub. All versions of the Cisco DVB CAR100:

- Provides connection speeds up to 10 Mbps—True broadband access and speeds significantly higher than any other access technology today. This makes them ideal for audio and video streaming, interactive entertainment, and Internet gaming at LAN speeds.
- Downloadable software—Software updates are downloaded and installed from the cable headend to the Cisco DVB CAR100 automatically.
- Based on open industry standards and DVB compliant.
- Offers both router and MAC bridging functionalities.
- Supports 40- and 56-bit DES encryption for secure data transmission.
- Are prepared for Voice over IP (VoIP)
- Port-level NAT (NAPT)—Provides additional security, because the IP address of the attached computer is made invisible to the outside world.
- Easily upgradable to the Cisco DVB CAR100-LAN for multiple computer use.

Additional Features of the Cisco DVB CAR100-LAN

The Cisco DVB CAR100-LAN also provides the following features:

- Connect up to 20 computers using an Ethernet hub.
- Port-level NAT (NAPT)—Allows small offices and cable operators to save money by requiring only one IP address for up to 20 computers.
- IP router, ensuring that the traffic between computers connected to the Cisco DVB CAR100 remains local, preventing unnecessary use of HFC bandwidth.

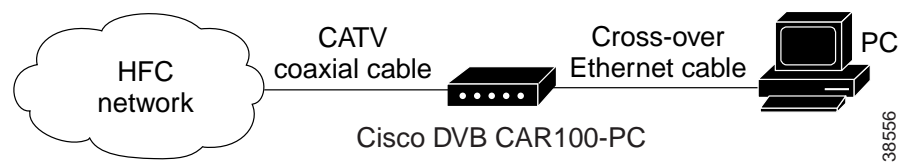
Network Overview

The Cisco DVB CAR100-PC version can be used to connect a single computer to the CATV network. The Cisco DVB CAR100-LAN version can connect up to 20 computers to the CATV network via an Ethernet hub. These two configurations are described in the following section.

Cisco DVB CAR100-PC Version

The Cisco DVB CAR100-PC version connects a single computer to the CATV network, as shown in Figure 1-1.

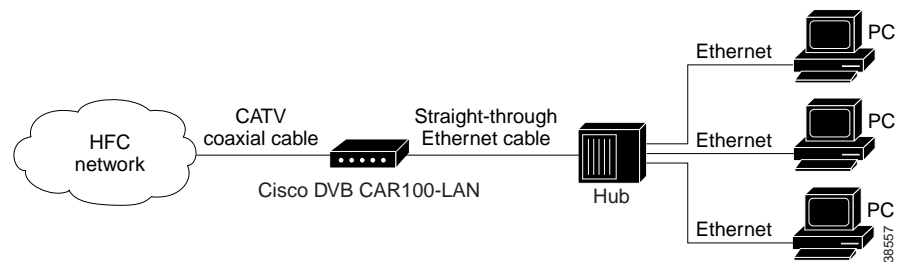
Figure 1-1 Cisco DVB CAR100-PC Network Configuration



Cisco DVB CAR100-LAN Version

The Cisco DVB CAR100-LAN version connects up to 20 computers to the CATV network using an Ethernet hub (not included in the delivery), as shown in Figure 1-2.

Figure 1-2 Cisco DVB CAR100-LAN Network Configuration

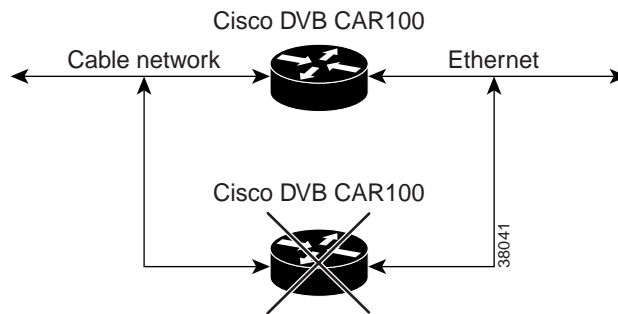


Note

Do not connect multiple Cisco DVB CAR100s in parallel between the CATV network and the Ethernet, because this can reduce network performance due to broadcast propagation and can cause problems when using MAC bridging.

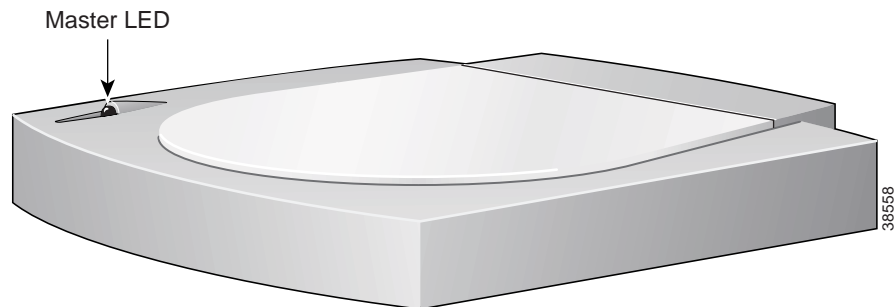
Figure 1-3 Multiple Cisco DVB CAR100s Cannot Be Connected in Parallel

Do not connect a unit in parallel to the Cisco DVB CAR100.



Physical Description

The front of the Cisco DVB CAR100 features the Master LED (see Figure 1-4), which shows a steady green when the router is successfully connected to the CATV network. If the Master LED is blinking amber, the cable access router is either still signing on, or there is an error. For further information, see Chapter 5, “Troubleshooting.”

Figure 1-4 Master LED Location

The rear of the Cisco DVB CAR100 provides sockets for connecting to the CATV network, a computer or Ethernet hub and power supply, and two green LEDs (see Figure 1-5). The Cable traffic LED shows data transmission to and from the CATV network, while the Ethernet traffic LED shows data transmission to and from the attached computer or LAN network. Both LEDs are used in troubleshooting situations.

Figure 1-5 Rear View of the Cisco DVB CAR100

