Troubleshooting

The LEDs in the Cisco DVB CAR100 are used for troubleshooting. If you encounter problems, carefully observe the LED patterns and supply this information to your cable service provider.

Note The first time the Cisco DVB CAR100 is installed, the sign-on can take up to 20 minutes. In extreme circumstances, this period can be even longer—as much as an hour. This does *not* necessarily indicate a problem with the cable modem, but Cisco does advise contacting your cable service provider for assistance.

LED Patterns

Location of LEDs

The Master LED is located on the top panel of the Cisco DVB CAR100. There are two green LEDs on the cable access router's rear panel: the Cable LED and the Ethernet LED.

Normal Operation

Table 5-1 describes the LED patterns during normal operation.

Table 5-1   LED Patterns During Normal Operation

LED	Description
Master LED	Permanently on (green) when a connection to the headend is established.
Cable LED	On (green) when exchanging data with the CATV network.
Ethernet LED	Blinks (green) when exchanging data with the attached PC or LAN.

During Startup

During startup, the Master LED should blink (amber); the Cable LED should be on (green) during the entire startup process, and the Ethernet LED should be off.

Tips If the Cisco DVB CAR100 is powered off, it should remain off for at least 10 minutes before being restarted. If the unit is powered on within 10 minutes, it is possible that it will fail to reestablish communication with the service provider's headend unit. If this occurs, power the unit off again, and leave it off for at least 10 minutes. Then power on the Cisco DVB CAR100 again, and communication with the service provider's headend unit should be reestablished as normal.

Master LED Patterns

The Master LED blinks (amber) according to specific patterns during startup. These patterns are divided into 4 beats, each lasting approximately 1/4 second, during which the Master LED can be on (1) or off (0).

The inactive pattern is 0000 (constantly off). The power-up pattern is 1111 (constantly on). After power-up, the Master LED starts blinking according to Table 5-2, as the Cisco DVB CAR100 goes through initialization, finds a valid frequency, and signs on to the CATV headend. The Cisco DVB CAR100 then requests an IP address from the CATV headend and waits for it to be assigned.

Table 5-2   LED Sequence During Startup

1. The cable access router is initializing.	2. The cable access router searches frequencies and signs on.	3. The cable access router has signed on, is sending a BOOTP request, and is waiting for a reply.
This is indicated by a *slow* blinking pattern; for example, 0001.	This is indicated by a *moderate* blinking pattern; for example, 0011.	This is indicated by a *fast* blinking pattern; for example, 0101.

Note   Typically, the fast blinking pattern (0101) is not seen, because the BOOTP answer arrives in less than a second

If the Cisco DVB CAR100 Does Not Receive an IP Address

If the Cisco DVB CAR100 does not receive an IP address, the Master LED blinks for a few minutes as multiple BOOTP requests are sent and then reinitializes, beginning the startup process over again. The Cisco DVB CAR100 continues sending BOOTP requests and reinitializing until it receives an IP address.

The Master LED turns green only after the Cisco DVB CAR100 has successfully completed these three phases.

Master LED, Amber

If the Master LED stays amber and does not turn green, one of the phases of initializing and sign-on has not been completed successfully. In this case:

Step 1   Make sure that the coaxial cable is connected correctly.

Step 2   Reconnect the Cisco DVB CAR100 to the power adapter to turn it on again.

If the problem persists, please contact your cable service provider.