

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.

LED Patterns

Location of LEDs

The Master LED is located on the front panel of the Cisco DVB CAR100. The cable access router's rear panel features two green LEDs: 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	BLINKS (green) when the cable interface is up.
Ethernet LED	BLINKS (green) when the Ethernet interface is up.

Cisco DVB CAR100 Cable Access Router Hardware Installation Guide

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.



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 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 should blink (amber) according to specific patterns during startup. These patterns are divided into 4 beats, during which the amber LED can be ON (=1) or OFF (=0).

The inactive pattern is 0000 (consistently OFF). The power up pattern is 1111 (constantly ON). After the power up the cable access router will start blinking according to Table 5-2, as it goes through initialization, finds a valid frequency, and signs on to the headend.

Table 5-2 LED Sequence During Startup

	and sign-on.	3. The cable access router has signed on and is sending a BOOTP request and waiting for a reply.
0001	0011	0101 ¹

1. Typically, the pattern 0101 is not seen, as the BOOTP answer arrives in less than one second.

IP Address/Subnetmask with BOOTP Failure

When the BOOTP server is in the process of assigning an IP address to the Cisco DVB CAR100, the cable access router's Master LED blinks approximately two times per second. Typically, the cable access router receives a reply to its BOOTP request so fast, it is impossible to see the LED blinking.

If the cable access router does not receive a reply, it blinks for a few minutes as multiple BOOTP requests are sent and then boots again. The cable access router will continue booting and sending BOOTP requests until it receives an IP address.

The Master LED will only turn green 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, it indicates that one of the phases of initializing and sign-on has not been completed successfully. In this case:

Step 1	Make sure the coaxial cable is connected correctly.
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Step 2 Reconnect the Cisco DVB CAR100 to the power adapter and turn it on again.

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

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78-10685-01