1 **Introduction**

The Cisco DVB CAR100 cable access router connects a cable TV (CATV) network to either one computer or to an Ethernet hub with one or more PCs connected. The Cisco DVB CAR100 enables bi-directional data communication at high bit-rates.

The Cisco DVB CAR100-PC version can connect a single computer to the CATV network. The Cisco DVB CAR100-LAN version can connect up to 20 computers to the CATV network using an Ethernet hub (not included in the delivery).

Reference Material

Before you install the Cisco DVB CAR100, make sure you have a copy of the *Cisco DVB CAR100 Cable Access Router Hardware Installation Guide* (Cisco document number 78-10685-02).

If you do not have a printed copy of this guide, one can be downloaded from Cisco Connection Online on the World Wide Web at http://www.cisco.com, http://www-china.cisco.com, or http://www-europe.cisco.com.

System Requirements

This section identifies the hardware requirements necessary to install and operate the Cisco DVB CAR100.

Cisco DVB CAR100-PC version:

- A computer equipped with an Ethernet network adapter

- A crossover Ethernet cable (not included in the delivery)

- Coaxial cable (not included in the delivery)

- Power supply unit

Cisco DVB CAR100-LAN version:

•   Up to 20 computers equipped with Ethernet network adapters

•   An Ethernet hub (not included in the delivery)

•   A straight-through Ethernet cable (not included in the delivery)

•   Coaxial cable (not included in the delivery)

•   Power supply unit

Getting Help

Please contact the vendor who supplied your equipment or the cable service provider for technical support information.

2 Installing the Cisco DVB CAR100

This section provides basic information necessary to install the Cisco DVB CAR100. Refer to the *Cisco DVB CAR100 Cable Access Router Hardware Installation Guide* for detailed installation instructions and illustrations.

The following figure shows the locations for connecting all cables to the rear panel connectors of the Cisco DVB CAR100.
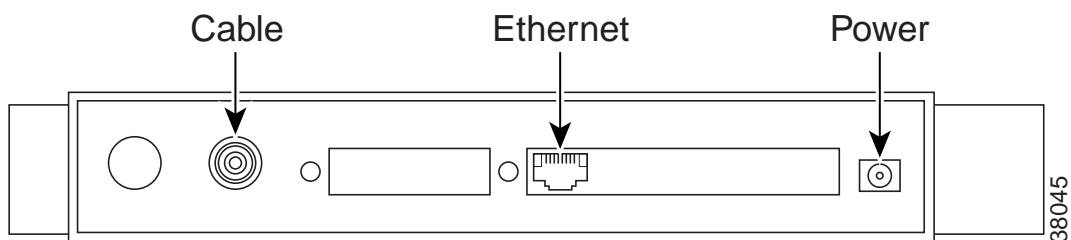
Step 1   Connect the Cisco DVB CAR100 to the CATV network:
Connect the coaxial cable to the CATV wall outlet and to the socket labelled **Cable** on the rear of the Cisco DVB CAR100.

Step 2   Connect the Cisco DVB CAR100 to the computer or hub:
If you have the Cisco DVB CAR100-PC, use a **crossover** Ethernet cable to connect the socket labelled **Ethernet** to the computer's Ethernet network adapter. If you have the Cisco DVB CAR100-LAN, use a **straight-through** Ethernet cable to connect the socket labelled **Ethernet** to the hub's Ethernet network adapter.

Step 3   Cisco DVB CAR100-LAN only:
Connect the computers to the Ethernet hub according to the hub manufacturer's instructions.

Step 4   Connect the power supply unit to the socket labelled **Power** on the back of the Cisco DVB CAR100, then connect the power supply unit to the electrical wall outlet.

Note   Always use the power supply unit supplied with the Cisco DVB CAR100.

3 **Computer Configuration**

Having completed the installation procedures, you have now successfully installed your Cisco DVB CAR100. It comes pre-configured for full end-user operation. However, you will need to configure the connected computers to communicate with the CATV network.

Note Consult the documentation provided by your CATV Service Provider, if your CATV network supports Automatic Network Configuration then follow the steps in **Automatic Network Configuration** below, if Automatic Network Configuration is nor supported proceed to **Manual Network Configutation**.

Automatic Network Configuration:

Automatic Network Configuration for Windows 95/98

Step 1   Choose **Start>Settings>Control Panel>Network**

Step 2   Select the **Configuration** tab

Step 3   Select the **TCP/IP➠[your Ethernet adapter]** entry, **Properties**, then the **IP Address** tab.

Step 4   Click **Obtain an IP address from a DHCP Server**.

Step 5   Click **OK** and Reboot the PC if neccessary.

If you have the CAR100-LAN version repeat steps 1 to 5 for each connected PC

Automatic Network Configuration for Windows NT

Step 1   Choose **Start>Settings>Control Panel>Network>Protocols**

Step 2   Click the **TCP/IP Protocols** entry in the list, then **Properties** and select the **IP Address** tab.

Step 3   Click **Obtain an IP address from a DHCP Server**.

Step 4   Click **Apply**.

Step 5   Click **OK** and Reboot the PC if neccessary

If you have the CAR100-LAN version repeat steps 1 to 5 for each connected PC

3 Computer Configuration (Continued)

Manual Network Configutation:

Note **All Operating Systems:** use the TCP/IP settings provided by your CATV Service Provider, or if no other data is provided use the values from the **TCP/IP Settings Table** below. Refer to your Operating System documentation for TCP/IP configuration procedures.

TCP/IP Settings Table		IP Address
Cisco DVB CAR100-PC	Single PC	192.168.128.10
Cisco DVB CAR100-LAN	PC 1	192.168.128.10
	PC 2	192.168.128.11
	PC 3	192.168.128.12
	PC 4 to PC 20	192.168.128.13 to 29

	Subnet Mask	Default Gateway
All versions	255.255.255.0	192.168.128.2

Manual TCP/IP Configuration for Windows 95/98

Step 1   Choose **Start>Settings>Control Panel>Network**

Step 2   Select the **Configuration** tab.

Step 3   Select the **TCP/IP➠[your Ethernet adapter]** entry, **Properties**, then the **IP Address** tab.

Step 4   Click **Specify an IP address** and enter values for IP address and subnet mask from the **TCP/IP Settings Table** above to configure the TCP/IP settings of your PC.

Step 5   Click the **Gateway** tab and enter values for the default gateway from the **TCP/IP Settings Table**

Step 6   Select **DNS Configuration**, **Enable DNS** and enter the DNS Server information supplied by your CATV Service Provider.

Step 7   Click **OK** and Reboot the PC if neccessary.

If you have the CAR100-LAN version repeat steps 1 to 7 for each connected PC

English

③ Computer Configuration (Continued)

Manual TCP/IP Configuration for Windows NT

Step 1   Choose **Start>Settings>Control Panel>Network>Protocols**

Step 2   Click the **TCP/IP Protocols** entry in the list, then **Properties** and select the **IP Address** tab.

Step 3   Click **Specify an IP Address**. If no other configuration data is provided by your Cable Operator, enter the values from the **TCP/IP Settings Table** above to configure the TCP/IP settings of your PC.

Step 4   Click **Apply**.

Step 5   Select the **DNS** tab and input the DNS Server information supplied by your cable service provider.

Step 6   Click **OK** and Reboot the PC if neccessary.

Note   If you have the CAR100-LAN version repeat steps 1 to 6 for each connected PC.

The PCs are now ready to access the CATV network using the Cisco DVB CAR100.

Troubleshooting Tips

For detailed troubleshooting information, refer to the *Cisco DVB CAR100 Cable Access Router Hardware Installation Guide.*

If the power LED on the front of the Cisco DVB CAR100 does not turn green after the initialization procedure, the modem is not functioning correctly.

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.

Contact your cable service provider for technical support information.

Safety

⚠ free air-flow around the Cisco DVB CAR100 and power supply unit at all times to prevent overheating.

4 Software Updates & Upgrades

Software Updates

Software updates for the Cisco DVB CAR100 are handled automatically by the cable service provider by means of the CATV network. This requires no user intervention.

Note   Cisco recommends leaving the modem switched on at all times so that automatic software updates can be completed successfully.

Upgrading the Cisco DVB CAR100-PC to the Cisco DVB CAR100-LAN

To upgrade the Cisco DVB CAR100 from the PC to the LAN version, contact the cable service provider.