NETGEAR®

Voice Cable Modem

User Manual

Model CM1150V

July 2018 202-11879-01

Support

Thank you for purchasing this NETGEAR product.

You can visit www.netgear.com/support to register your product, get help, access the latest downloads and user manuals, and join our community. We recommend that you use only official NETGEAR support resources. Contact your Internet service provider for technical support.

Trademarks

©NETGEAR, Inc. NETGEAR and the NETGEAR Logo are trademarks of NETGEAR, Inc. Any non-NETGEAR trademarks are used for reference purposes only.

Compliance

For regulatory compliance information, visit http://www.netgear.com/about/regulatory. See the regulatory compliance document before connecting the power supply.

Contents

Chapter 1 Hardware Setup	
Unpack Your Cable Modem. Front Panel and LEDs Rear Panel Label System Requirements Install and Activate Your Cable Modem Set Up the Hardware Activate Your Internet Service With Xfinity Connect Your Cable Modem to a Router After Installation and Activation Perform a Speed Test	6 9 10 12
Chapter 2 Monitor Voice Telephone Lines	
View Voice StatusView the MTA Call ListView the EMTA Event Log	15
Chapter 3 Manage Your Network	
Log In to the Cable Modem View Cable Modem Initialization View Cable Modem Status View and Clear Event Logs Specify the Cable Connection Starting Frequency Change the admin Password Reboot the Cable Modem Reset the Cable Modem to Factory Default Settings Use the Reset Button on the Back Panel Use the Factory Reset Software Button	18 19 20 21 21
Chapter 4 Troubleshooting	
Use the LEDs to Troubleshoot	25 26
Chapter 5 Supplemental Information	
Factory SettingsTechnical Specifications	

Hardware Setup

1

This chapter covers the following topics:

- Unpack Your Cable Modem
- Front Panel and LEDs
- Rear Panel
- Label
- System Requirements
- Install and Activate Your Cable Modem

For more information about the topics covered in this manual, visit the support website at *support.netgear.com*.

Note An uninterruptible power supply (UPS) can be purchased separately for continued service during power outages. For a list of supported UPS models, visit netgear.com/support/product/CM1150V.

Unpack Your Cable Modem

Your package contains the following items.



Figure 1. Package contents

- 1. High Speed Cable Modem (Model CM1150V)
- 2. Phone cable
- 3. Ethernet cable
- 4. Power adapter

Front Panel and LEDs

The cable modem provides status LEDs on the front.

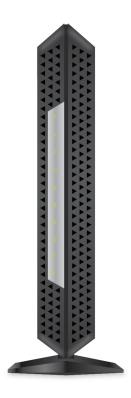


Figure 2. Front panel

You can use the LEDs to verify status and connections. The following table lists and describes each LED on the cable modem.

Table 1. LED descriptions

LED	Icon	Description	
Power	し	 Solid green. Power is supplied to the cable modem. Off. No power is supplied to the cable modem. 	
		Solid red. The cable modem is too warm and might overheat. For more information about this condition, see <i>Use the LEDs to Troubleshoot</i> on page 24.	

Table 1. LED descriptions (Continued)

Downstream	M,	•	Solid amber. One downstream channel is locked. Solid green. Two or more downstream channels are locked. Blinking green. The cable modem is scanning for a downstream channel or the cable modem is in partial service
		•	mode. Off. No downstream channel is locked.
Upstream	1	•	Solid amber. One upstream channel is locked.
	•	•	Solid green. Two or more upstream channels are locked.
		•	Blinking amber . The cable modem is scanning for an upstream channel.
		•	Blinking green. The cable modem is in partial service mode or the cable modem is in partial service mode.
		•	Off. No upstream channel is locked.
Online		•	Solid green. The cable modem is online.
		•	Blinking green. The cable modem is synchronizing with the cable provider's cable modem termination system (CMTS).
		•	Off. The cable modem is offline.

Table 1. LED descriptions (Continued)

Ethernet	¶1 ¶2 ¶3 ¶4	•	Green . A powered-on device is connected to the Ethernet port at 1000 Mbps.
		•	Amber. A powered-on device is connected to the Ethernet port at 10 Mbps or 100 Mbps.
		•	Off. No device is connected to the Ethernet port.
		•	Blinking green or amber. The Ethernet port is processing traffic.
Tel 1 and 2	1) 2)	•	Solid green. The Tel 1 or 2 port is online. Blinking green. The Tel 1 or 2 port is processing a call or the phone is off-hook. Off. The Tel 1 or 2 port is not in use.

Rear Panel

The connections and button on the rear panel are shown in the following figure.



Figure 3. Rear panel

Viewed from top to bottom, the back panel contains the following components:

- Reset button. Pressing the Reset button resets your cable modem. If the Reset button is pressed for at least seven seconds, the Power LED blinks green and your cable modem returns to its factory settings.
- Ethernet ports 1-4. For installation and activation, connect a computer to Ethernet port 1. After you install your cable modem and activate your Internet service, you can disconnect your computer and connect a router to Ethernet port 1.

Note Your cable modem comes with plugs that cover Ethernet ports 2, 3 and 4. For more information about Ethernet ports 2, 3, and 4, visit netgear.com/support/product/CM1150V.

Tel 1 and 2 ports. Connect your phone line to the Tel 1 port.

Note The Tel 2 port works only for a two-phone-line subscription.

- Coaxial cable port. Connect the cable port to a cable wall outlet.
- Power On/Off button. Press the Power On/Off button to provide power to your cable modem.
- DC power connector. Connect the power adapter that came in the product package to the DC power connector.

Label

The cable modem label shows the login information, MAC address, and serial number.



Figure 4. Cable modem label

System Requirements

You need the following to install your cable modem:

- Compatible operating system:
 - Windows 10
 - Windows 8
 - Windows 7

- Windows Vista
- Windows XP
- Windows 2000
- Mac OS
- Other operating systems running a TCP/IP network
- Compatible web browser:
 - Microsoft Internet Explorer 5.0 or later
 - Firefox 2.0 or later
 - Safari 1.4 or later
 - Google Chrome 11.0 or later
- Xfinity cable broadband Internet service

Note An uninterruptible power supply (UPS) can be purchased separately for continued service during power outages. For a list of supported UPS models, visit netgear.com/support/product/CM1150V.

Install and Activate Your Cable Modem

The cable modem provides a connection between your cable Internet provider's network and your computer, router, or WiFi router.

Set Up the Hardware



Figure 5. Connect your cable modem to a computer

To set up your cable modem:

1. Collect your Xfinity account information.

Collect your Xfinity account information, such as your account mobile phone number, user name, password, and account number.

2. Turn off and disconnect existing modems and routers.

If you are replacing a modem that is currently connected in your home, unplug the modem and plug the new cable modem into the same outlet.

3. Connect a coaxial cable.

Use a coaxial cable to connect the cable port on your cable modem to a cable wall outlet.

Make sure that the cable is tightly connected.

4. (Optional) Connect a phone.

Connect your phone to the Tel 1 port on the rear panel of the cable modem using the phone cable.

Note The Tel 2 port works only for a two-phone-line subscription.

5. Connect the power adapter.

Connect the power adapter to your cable modem and plug the power adapter into an electrical outlet.

When the startup is complete, the Power LED lights green. If the Power LED does not light, press the **Power On/Off** button.

If the Power LED does not light, make sure that the Power On/Off button is in the On position.

6. Wait for the Online LED to light solid green.

This process might take up to 10 minutes.

Note When the Online LED lights, your cable modem is not connected to the Internet yet. You must activate your cable modem with your cable Internet provider.

7. Connect a computer to your cable modem.

Use the Ethernet cable that is provided in the package to connect a computer to Ethernet port 1 on your cable modem.

8. Activate your Internet service.

For information about how to activate your Internet service, see *Activate Your Internet Service With Xfinity* on page 12.

Note After you install and activate the cable modem, you can disconnect the computer and connect a router to the cable modem. For more information, see *Connect Your Cable Modem to a Router After Installation and Activation* on page 12.

9. Dial a number to place a test call.

Note To make calls, you need a voice service subscription with Xfinity.

Activate Your Internet Service With Xfinity

Before you start the self-activation process, collect the following information:

- Personal information associated with your Xfinity account (you need one of the following):
 - Mobile phone number
 - Xfinity user name and password
- Xfinity account number
- Cable modem model number, which is CM1150V
- Cable modem serial number
- Cable modem MAC address
- Cable modem MTA MAC address

Your cable modem's serial number and MAC address are on the cable modem label.

Note If you have Xfinity Voice, ask Xfinity to register the phone lines.

▶To activate your Xfinity Internet service:

- 1. Close all web browsers.
- 2. Launch a web browser.

You are redirected to the Xfinity self-activation page. If you are not redirected to the Xfinity self-activation page, visit *xfinity.com/activate*.

3. Provide your Xfinity credentials and complete the self-activation process.

This process might take up to 10 minutes, during which the cable modem reboots twice.

Note If you're unable to activate your Xfinity Internet service using the self-activation page, call Xfinity customer service at 1-800-XFINITY (1-800-934-6489).

Connect Your Cable Modem to a Router After Installation and Activation

After you install the cable modem and activate your Internet service, you can disconnect the computer and connect a router to the cable modem.

Note To install your cable modem, use Ethernet port 1. Your cable modem comes with plugs that cover Ethernet ports 2, 3 and 4. These ports can be used to connect a router that supports Ethernet port aggregation. Your cable modem might not support Ethernet port aggregation the first time that you set it up. Check *netgear.com/support* to find out if your cable modem supports Ethernet port aggregation yet.



Figure 6. Connect your cable modem to a router

► To connect your cable modem to a router after installation and activation:

- Reboot your cable modem by unplugging the power cable from the cable modem and plugging it back in.
 - Wait for the Online LED to stop blinking and light solid green.
- 2. Use an Ethernet cable to connect the Ethernet port on your cable modem to the WAN or Internet port on the router.
- 3. Power on your router.
- 4. Wait until your router is ready.
- Connect a computer to your router.For more information about how to set up your router, see the documentation that came with your router.

Perform a Speed Test

To determine the accurate Internet speed, visit speedtest.xfinity.com/ and perform a speed test.

If your actual speed is lower than your subscribed speed, contact XFINITY.

Monitor Voice Telephone Lines

2

This chapter includes the following sections:

- View Voice Status
- View the MTA Call List
- View the EMTA Event Log

View Voice Status

The cable modem functions as a multimedia terminal adaptor (MTA), allowing the cable modem to provide voice services. You can view some basic MTA voice information.

To view the MTA voice status:

- 1. Launch a web browser from a computer that is connected to your cable modem.
- 2. Enter http://192.168.100.1.

A login window opens.

3. Enter the admin user name and password.

The user name is **admin**. The default password is **password**. The user name and password are case-sensitive.

The BASIC Home page displays.

4. Select Voice.

The Voice Status page displays the following information:

- MTA Provision Status. This is the current MTA provision state.
- MTA MAC Address. This is the MAC address of the MTA interface.
- MTA Telephony Line 1 and Line 2 Status. These are the hook states of line 1 and line 2.
- MTA Line 1 and Line 2 HD Audio Status. These are the MTA HD audio states of line 1 and line 2 during codec negotiation. If the lines are enabled, it means that each line is capable of using the G.722 codec.
- 5. To refresh the Voice Status page, click the Refresh button.

View the MTA Call List

You can view the multimedia terminal adapter (MTA) call list for your cable modem. You can also view the codec used for the last call and some of the previous calls.

► To view or refresh the MTA call list:

- 1. Launch a web browser from a computer that is connected to your cable modem.
- Enter http://192.168.100.1.

A login window opens.

3. Enter the admin user name and password.

The user name is **admin**. The default password is **password**. The user name and password are case-sensitive.

The BASIC Home page displays.

4. Select MTA Call List.

The MTA Call List page displays.

5. To see the most recent entries, click the **Refresh** button.

View the EMTA Event Log

You can view the embedded multimedia terminal adapter (EMTA) event log for your cable modem.

►To view the EMTA event log:

- 1. Launch a web browser from a computer that is connected to your cable modem.
- 2. Enter http://192.168.100.1.

A login window opens.

3. Enter the admin user name and password.

The user name is **admin**. The default password is **password**. The user name and password are case-sensitive.

The BASIC Home page displays.

4. Select ADVANCED > EMTA Event Log.

The MTA Event Log page displays the EMTA event log.

5. To refresh the page, click the **Refresh** button.

Manage Your Network

3

After you set up the cable modem, you do not need to log in to the cable modem for normal operation. However, you can log in to the cable modem to change a very limited number of settings and monitor the cable modem.

This chapter includes the following sections:

- Log In to the Cable Modem
- View Cable Modem Initialization
- View Cable Modem Status
- View and Clear Event Logs
- Specify the Cable Connection Starting Frequency
- Change the admin Password
- Reboot the Cable Modem
- Reset the Cable Modem to Factory Default Settings

Log In to the Cable Modem

To log in to the cable modem:

1. Connect a computer to your cable modem.

You can connect a computer to your cable modem using the following methods:

- Connect a computer to your cable modem using an Ethernet connection.
- Connect a WiFi router to your cable modem using an Ethernet connection, and connect a computer to your router using a WiFi or Ethernet connection.
- 2. Launch a web browser.
- 3. Enter http://192.168.100.1.

A login window opens.

4. Enter the admin user name and password.

The user name is **admin**. The default password is **password**. The user name and password are case-sensitive.

The BASIC Home page displays.

View Cable Modem Initialization

You can track the initialization procedure of the cable modem and get details about the downstream and upstream cable channel. The time is displayed after the cable modem is initialized.

The cable modem automatically goes through the following steps in the provisioning process:

- 1. Scans and locks the downstream frequency and then ranges the upstream channels.
- 2. Obtains a WAN address for the cable modem.
- 3. Connects to the Internet.

► To view the status of the cable modem initialization:

- 1. Launch a web browser from a computer that is connected to your cable modem.
- 2. Enter http://192.168.100.1.

A login window opens.

3. Enter the admin user name and password.

The user name is **admin**. The default password is **password**. The user name and password are case-sensitive.

The BASIC Home page displays.

4. Select Cable Connection.

The Cable Connection page displays.

The Startup Procedure section displays the initialization progress. The page also displays the status of all downstream and upstream channels. (You must scroll down to view all the channels.) The number of downstream and upstream channels that are locked depends on the number of channels that your Internet provider uses.

View Cable Modem Status

► To view cable modem status and usage information:

- 1. Launch a web browser from a computer that is connected to your cable modem.
- 2. Enter http://192.168.100.1.

A login window opens.

3. Enter the admin user name and password.

The user name is **admin**. The default password is **password**. The user name and password are case-sensitive.

The BASIC Home page displays.

4. Click the ADVANCED tab.

The ADVANCED Home page displays information about your cable modem.

View and Clear Event Logs

Event logs capture important cable modem events.

►To view and clear the event logs:

- 1. Launch a web browser from a computer that is connected to your cable modem.
- 2. Enter http://192.168.100.1.

A login window opens.

3. Enter the admin user name and password.

The user name is **admin**. The default password is **password**. The user name and password are case-sensitive.

The BASIC Home page displays.

4. Select ADVANCED > Administration > Event Log.

The Event Log page displays the following information:

- Time. The time the event was recorded.
- Priority. The severity for this event.
- Description. A description of this event.

- 5. To refresh the page, click the **Refresh** button.
- 6. To clear the log entries, click the Clear Log button.

Specify the Cable Connection Starting Frequency

The starting frequency is automatically generated. For most Internet connections, you do not need to specify this information. If you must enter a starting frequency, contact your Internet provider.

To change the starting frequency:

- 1. Launch a web browser from a computer that is connected to your cable modem.
- 2. Enter http://192.168.100.1.

A login window opens.

3. Enter the admin user name and password.

The user name is **admin**. The default password is **password**. The user name and password are case-sensitive.

The BASIC Home page displays.

4. Select Cable Connection.

The Cable Connection page displays the status of all downstream and upstream channels.

- 5. In the **Starting Frequency** field, type a number as instructed by your cable Internet provider.
- Click the Apply button.

Your settings are saved.

Change the admin Password

You can change the default password that is used to log in to the cable modem with the admin user name.

Note Be sure to change the password for the user name admin to a secure password. The ideal password contains no dictionary words from any language and contains uppercase and lowercase letters, numbers, and symbols. It can be up to 30 characters.

► To set the password for the user name admin:

- 1. Launch a web browser from a computer that is connected to your cable modem.
- 2. Enter or http://192.168.100.1.

A login window opens.

3. Enter the admin user name and password.

The user name is **admin**. The default password is **password**. The user name and password are case-sensitive.

The BASIC Home page displays.

4. Select ADVANCED > Administration > Set Password.

The Set Password page displays.

- 5. Type the old password, and type the new password twice.
- 6. Click the Apply button.

Your settings are saved.

Reboot the Cable Modem

Rebooting the cable modem disconnects all network connections to the cable modem's local area network (LAN). After the cable modem is finished booting and reestablishes a connection with the Internet, the devices on your network reconnect to the cable modem's LAN.

To reboot the cable modem:

- 1. Launch a web browser from a computer that is connected to your cable modem.
- 2. Enter http://192.168.100.1.

A login window opens.

3. Enter the admin user name and password.

The user name is **admin**. The default password is **password**. The user name and password are case-sensitive.

The BASIC Home page displays.

Select ADVANCED.

The ADVANCED Home page displays.

5. Click the **Reboot** button.

A confirmation message displays.

6. Click the **OK** button.

The cable modem reboots.

Reset the Cable Modem to Factory Default Settings

To reset the cable modem to factory default settings, you can use either the **Reset** button on the back panel of the cable modem or the **Factory reset** software button. However, if you changed the default password that you use to access the cable modem and lost the password, you must use the **Reset** button on the back panel.

After you reset the cable modem to factory default settings, the password is **password**. The LAN IP address is always 192.168.100.1. You cannot change this LAN IP address.

Use the Reset Button on the Back Panel



CAUTION:

This process erases all settings that you configured in the cable modem.

► To reset the cable modem to factory default settings using the Reset button:

- 1. On the back of the cable modem, locate the **Reset** button.
- 2. Using a straightened paper clip, press and hold the **Reset** button until the cable modem reboots itself. The configuration is reset to factory default settings. This process takes about one minute.

Use the Factory Reset Software Button



CAUTION:

This process erases all settings that you configured in the cable modem.

To reset the cable modem to factory default settings using the Factory reset software button:

- 1. Launch a web browser from a computer that is connected to your cable modem.
- 2. Enter http://192.168.100.1.

A login window opens.

3. Enter the admin user name and password.

The user name is **admin**. The default password is **password**. The user name and password are case-sensitive.

The BASIC Home page displays.

4. Select ADVANCED.

The ADVANCED Home page displays.

5. Click the Factory reset button.

A confirmation message displays.

6. Click the OK button.

The configuration is reset to factory default settings. When the reset is complete, the cable modem reboots. This process takes about one minute.



WARNING:

To avoid the risk of corrupting the firmware, do not interrupt the reset. For example, do not close the browser, click a link, or load a new page. Do not turn off the cable modem.

Troubleshooting

4

This chapter provides information about troubleshooting your cable modem.

The chapter includes the following sections:

- Use the LEDs to Troubleshoot
- Cannot Log In to the Cable Modem
- Troubleshoot the Cable Internet Connection
- Troubleshoot Voice Connectivity

Use the LEDs to Troubleshoot

The following table provides help when you are using your cable modem's LEDs for troubleshooting.

Table 2. Troubleshooting your cable modem's LEDs

LED Behavior	Action	
All LEDs are off when the cable modem is plugged in.	 Make sure that the power cord is securely connected to your cable modem and that the power supply adapter is securely connected to a functioning power outlet. Make sure that you are using the 12 VDC, 2.5A power adapter from NETGEAR for this product. If the error persists, a hardware problem occurred. Contact Technical Support. 	
All LEDs stay on.	 Reset the configuration of the cable modem to its factory defaults. If the error persists, a hardware problem occurred. Contact Technical Support. 	
The Ethernet LED is off for a port with an Ethernet connection.	 Make sure that the Ethernet cable connections are secure at the cable modem and at the computer, router, or WiFi router. Make sure that power is turned on to the connected hub or computer. Be sure that you are using the correct cable. 	

Table 2. Troubleshooting your cable modem's LEDs (Continued)

LED Behavior	Action
The Online LED is off and the cable modem is connected to the cable wall jack.	 Make sure that the coaxial cable connections are secure at the cable modem and at the wall jack. Make sure that your Internet service provider provisioned your cable Internet service. Your ISP can verify that the signal quality is good enough for cable modem service. Remove any excessive splitters that you installed on your cable line.
The Power LED lights red.	 The cable modem is too warm and might overheat. Do the following: Disconnect the power adapter. Wait a few minutes to let the cable modem cool down. Make sure that the cable modem is placed in a vertical position. Make sure that the cable modem is placed in a location with good ventilation. Reconnect the power adapter.

Cannot Log In to the Cable Modem

If you cannot access your cable modemfrom a computer that is connected to your cable modem or to a router that is connected your cable modem, check the following:

- If your computer is connected to your cable modem with an Ethernet cable, check the connection.
- Make sure that your computer's IP address is on the same subnet as the cable modem. The IP address of your computer must be in the range of 192.168.100.2 to 192.168.100.254.
- Make sure that Java, JavaScript, or ActiveX is enabled in your browser. If you are using Internet Explorer, click the Refresh button to make sure that the Java applet is loaded.
- Try quitting the browser and launching it again.
- Make sure that you are using the correct login information. Your cable modem user name admin is lowercase (Caps Lock is off).

If your cable modem does not save changes you made, do the following:

- When entering configuration settings, be sure to click the **Apply** button before moving to another page, or your changes are lost.
- Click the **Refresh** or **Reload** button in the web browser. It is possible that the changes occurred, but the web browser is caching the old configuration.

Troubleshoot the Cable Internet Connection

If your cable modem cannot access the Internet but the Internet LED lights green, make sure that the cable MAC address or device MAC address of your cable modem is registered with Xfinity.

Troubleshoot Voice Connectivity

The following table includes tips for troubleshooting voice connectivity.

Table 3. Quick tips for troubleshooting voice connectivity

Problem	Possible Solution	
No dial tone	 If you use a cordless phone, check that the base of your phone is turned on and receiving power and that the cordless phone battery is not low. Check that the phone cable connections are secure at the cable modem and at base of your phone, and that the cable modem is turned on and receiving power. 	
No ringing for incoming calls	 Check that call forwarding is not enabled. If you use a cordless phone, check that the ringer is not turned off. 	
No caller ID name	It is possible that the calling party blocked its caller ID. If this is true, you might be able to program your phone to recognize an incoming number and associate a name with that number.	

Supplemental Information

This appendix covers the following topics:

- Factory Settings
- Technical Specifications

Factory Settings

The following table shows the factory default settings for the cable modem.

Table 4. Factory default settings

Feature		Default Setting
Router login User login URL		http://192.168.100.1.
	User name (case-sensitive)	admin
	Login password (case-sensitive)	password
Internet connection	WAN MAC address	Use default hardware address
	WAN MTU size	1500
	Port speed	AutoSensing

Technical Specifications

The following table lists the technical specifications for the cable modem.

Table 5. Technical specifications

Feature	Specification	
Power adapter	 Input: 110–120V, 47–60 Hz Output: 12 VDC, 2.5A 	
Physical specifications	 Dimensions (W x D x H): 6.1 x 3.4 x 10.3 in. (155 x 87 x 261 mm) Weight: 1.33 lb (603 g) 	
Environmental	 Operating temperature: 32° to 104°F (0° to 40°C) Operating humidity: 90% maximum relative humidity, noncondensing 	
Interface	 Local: Four 10/100/1000 RJ-45 Gigabit Ethernet ports Voice: Two bridged RJ-11 phone ports Internet: Coaxial cable connector, DOCSIS 3.0, 3.1; backward-compatible with DOCSIS 2.0 	
Memory	128 MB Flash256 MB RAM	

Table 5. Technical specifications (Continued)

Channels	 32 bonded downstream + 2 OFDM 8 bonded upstream + 2 OFDMA
Certifications	CableLabs certified for U.S. cable Internet services