

MODEL 5352 QUICK START

This Quick Start describes how to connect the Model 5352 Cable Modem/Router to a cable modem service and how to use Model 5352 for Internet access by wireless or Ethernet-capable devices. More detailed information, including information about advanced features, is in the User Manual on our website at www.zoomtel.com/5352manual

Package Contents

- Cable modem
- Power cube
- Ethernet RJ-45 cable
- This Quick Start flyer

Before installing your cable modem, please read this.

You need to connect the cable modem to a cable modem service that uses any of the popular DOCSIS standards -3.0, 2.0, or 1.1. If you need to get cable modem service, please speak with your cable service provider.

Your cable service provider will need to know your modem's **MAC ADDRESS**, which is **printed on a label on the bottom of your modem**. You provide this when you order cable modem service, or by calling the cable company before or after installing your modem, or by entering your CM-MAC ADDRESS on an account setup web page that appears when you first connect your cable modem to your provider's network. Normally your cable service provider will tell you when to provide the CM-MAC address. You may also be asked for your cable modem's model name and number, which is **ZOOM 5352**. If you need the modem's **serial number**, you can find it near the MAC address on the label.

If you are replacing an "old" cable modem, do this:

- 1 Disconnect the coaxial cable from the old cable modem and connect it to your Zoom modem. If the coaxial cable has a screw-on connector, turn the connector clockwise when tightening the cable onto the Zoom cable modem.
- 2 If there's an Ethernet cable plugged into the old cable modem, unplug the Ethernet cable from the old cable modem and plug it into any of the Zoom cable modem's LAN jacks.

- 3 Connect the Zoom power cube between the Zoom cable modem and a live power jack. DO NOT use your old cable modem's power cube on your Zoom cable modem. Make sure the cable modem's Power Switch is ON.
- 4 What you do next depends on your cable modem company. Typically you can call your cable modem company's support department and tell them your cable modem is hooked up. They'll normally ask for the information mentioned above in "Before Installing Your Cable Modem." Some cable companies also let you just open the browser on a computer that's connected to the Zoom cable modem. A setup page comes up, and you follow the instructions.
- 5 Go to "Now that your cable modem is connected, do this." below.

If this is a first-time cable modem installation (that is, you are NOT replacing an "old" cable modem), do this:

1 Connect a "live" coaxial cable from your cable service provider to your cable modem. (If you're not sure a cable is live, you can see whether you get a good TV signal when that cable is used with a working TV set-top box.) Here are some ways you can get the live cable:



Coaxial Cable

Cable TV Jack

- You have a cable TV cable ("coaxial cable") with a male connector on the end that isn't connected to anything. This cable may be coming out of a wall or connected to a cable TV jack.
- There's a cable TV jack in your wall. You can connect a cable TV "coaxial cable" between that jack and your cable modem. You may have a coaxial cable, possibly one that came with a cable modem starter kit from your cable service provider. If you don't have a coaxial cable, you can get one at most electronics stores. You want one with a screw-in male F connector at each end, with a length that works for your installation.
- If you don't have an available cable TV cable or wall jack, use a coaxial "T adapter" or "splitter" available from most electronics retailers. (see example at right). Make sure you get one designed for cable modems and/or cable TV. These typically have one female IN jack and two female OUT jacks. You can disconnect a live cable from your TV set-top box and screw it into the IN jack of the splitter. Then connect one coaxial cable from an OUT jack to your TV set-top box and another coaxial cable from the other OUT jack to your cable modem. You can see that this approach uses one splitter and 2 additional coaxial cables, each of which has male connectors on each end. Some electronics retailers carry the Zoom Cable Modem Connection Kit which has an excellent splitter and 2 coaxial cables packaged together at a reasonable price. You can also purchase splitters and coaxial cable separately if you prefer to do that, perhaps because you need a special length of coaxial cable.

- 2 Connect the supplied Ethernet cable between any cable modem LAN jack and a computer's Ethernet jack. We recommend that you do this even if you later plan to disconnect this computer. If connecting the Ethernet cable to a computer is difficult or impossible, you can make a wireless connection as discussed below in "Connecting Model 5352 wirelessly to some device."
- **3** Connect the Zoom power cube between the Zoom cable modem and a live power jack. Make sure the cable modem's Power Switch is **ON**.
- 4 What you do next depends on your cable modem company. Typically you can call your cable modem company's support department and tell them your cable modem is hooked up. They'll normally ask for the information mentioned above in "Before installing your cable modem please read this." Some cable companies also let you just open the browser on a computer that's connected to the Zoom cable modem. A setup page comes up automatically, and you follow the instructions.
- 5 Go to "Now that your cable modem is connected, do this." below.

Now that your cable modem is connected, do this.

When your cable modem first connects to your cable service provider, allow 5 to 30 minutes for the cable modem to connect to the network. The cable modem uses this time to locate and connect to the appropriate channels for communication. You'll see the DS (downstream), US (upstream), and Online modem lights flashing until the Online light stays steady green to signal success. (Blue US/DS LEDs indicate channel bonding.)

- To check that your cable modem is working, open your browser and go to a familiar Web site. If it works, congratulations! Installation is complete for a single PC. For Internet access using a smartphone, tablet, or other wireless device, see "Connecting Model 5352 wirelessly to some device."
- If you want to connect additional computers or other devices using the modem/router's Ethernet/LAN ports, please see "Read This Only if You Are Connecting additional computers and/or other devices to Model 5352's Ethernet/LAN ports."
- In the unlikely event that you want to configure advanced options, please refer to the User Manual on our website at <u>www.zoomtel.com/5352manual</u>

Please note the following:

- Do not block Model 5352's vents in any way.
- Model 5352 can be horizontal or vertical. To put the cable modem/router in a vertical orientation, use the swiveling "foot" at the bottom of the unit.

Hardware Connection



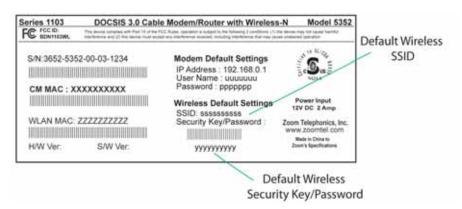
	DESCRIPTION	
LAN 1-4 (Gigabit Ethernet 1-4)	Four 10/100/1000 auto-sensing Ethernet ports for computers and other devices that have an Ethernet port.	
RESET	Press and hold this recessed button at least 8 seconds in the unlikely event that you want to restore the default factory settings. This button is recessed to prevent accidental resets of your cable modem/router.	
RF / Cable	Connect your coaxial cable line to this port.	
POWER	Connect the supplied power cube to this port.	
ON/OFF SWITCH	Powers the cable modem/router on or off.	

Connecting Model 5352 wirelessly to some device

A Wi-Fi compatible computer, smartphone, game station, or other device can access the Internet wirelessly through your Cable Modem/Router. You can connect up to 253 devices wirelessly. To make the wireless connection, follow these steps:

- 1 First locate the wireless connection setup on your device, and then select the cable modem/router network with the same name as the SSID name on the bottom of your cable modem/router.
- 2 Next you will be prompted to enter the **Security Key** or **Password** for your wireless network. The WPA/WPA2 security key is printed on the bottom label of your cable modem/router and is unique to you.

Cable Modem Bottom Label:



3 When your Model 5352's Online light is solid green as discussed above, open your device's browser and go to a website to test your wireless setup. If it works, congratulations! If it doesn't, please see the **Troubleshooting Tips** in the User Manual.

Note: In the unlikely event that you want to change the unique SSID or the Security Key, please refer to the User Manual on our website at <u>www.zoomtel.com/5352manual</u>

Read this only if you are connecting additional computers and/or other devices to the cable modem/router's Ethernet/LAN ports

You can plug up to four computers, game consoles, or other Ethernet-capable devices into the cable modem's LAN ports. For information about your specific device, please refer to the documentation that came with that device. Follow the instructions on the other side of this Quick Start for each computer or other device.

- 1 If you connected the cable modem to a computer using a wired connection when setting up the cable modem, unplug the computer now if you don't want it to stay connected to the cable modem.
- 2 To connect a computer or other Ethernet-capable device, plug one end of an Ethernet cable into any available Ethernet (LAN 1, 2, 3, or 4) port on the cable modem and plug the other end of the Ethernet cable into the Ethernet port of the additional device you want to connect to the cable modem. (If you are connecting a hub or a switch, this is typically called an Uplink or Expansion port.) **If you are connecting a computer or game station, go to step 5 of this section.**
- 3 If you are connecting a network device such as a switching hub, use the instructions that came with that device. Then reboot any computer that is part of your network. For example, if you connected a switching hub, reboot any computer that will make a wireless connection to that switching hub.
- 4 If you are connecting a HomePlug adapter pair with one adapter plugged into the cable modem and an AC outlet, and the other adapter plugged into a computer or game station and an AC outlet, make those connections and then go to step 5.
- 5 Verify that your Internet connection is working. Open a Web browser on each computer that's using your network and try to connect to a familiar Web address.

Note: If at any time you need to make changes to the cable modem's configuration, open a web browser from any PC on your cable modem's network and type **http://192.168.0.1** to open the Zoom Configuration Manager. Alternately, you can connect a computer directly to the cable modem, open its browser, and then type **http://192.168.0.1**.

Congratulations! You have connected an additional device to the Internet. You can connect up to 4 Ethernet-capable devices to the cable modem/router, following the instructions above for each device and starting at step 2 of this section. You can also connect wireless devices as discussed above.

Gaming

If you are using your cable modem for gaming, you may need to make changes to the cable modem's Advanced configuration page for the game to work. This can be done by setting up a DMZ or using port triggering. Please see the User Manual to decide which option to select and instructions on setting it up.

Advanced Features

You can configure advanced features after logging in to the Zoom Configuration Manager. Go to the section **Logging in to the Zoom Configuration Manager**. You may want to refer to the User Manual on our website at www.zoomtel.com/5352manual for information about all the options on the cable modem/router menu.

Logging in to the Zoom Configuration Manager

Step 1: Connecting the Cable Modem/Router to a Computer

1 Check that the router is connected to a computer as discussed above.

Step 2: Establishing Communication

- 1 Open your Web browser, enter http://192.168.0.1 in the address bar, and press the Enter key to open the Cable Modem/Router configuration software.
- 2 In the login dialog box, type the following User Name and Password in lower case, then click **OK**.

User Name: admin Password: admin

3 The Status page should appear. If the Status page doesn't appear, please see Troubleshooting Tips.

From the Zoom Configuration Manager, you can configure advanced features and make changes to the default wireless security options including the SSID and Pre-Shared Key. You may want to refer to the User Manual at www.zoomtel.com/5352manual .

Front Panel LEDs

Your Zoom cable modem has several lights on its front panel to help you monitor the cable modem/router's status.

LIGHT	COLOR	DESCRIPTION
WPS	Green	 Blinking: WPS is in discovery mode (LED blinks for up to 2 minutes) ON: LED lit solid for 30 seconds after WPS configuration is successful OFF (after 2 minutes blinking): No Wi-Fi client associated with the cable modem/router via WPS
WLAN	Green	Blinking: Data is flowing ON: Wi-Fi is enabled OFF: Wi-Fi is not enabled
LINK 1-4 Ethernet LAN ports	Green <i>or</i> Amber	Blinking: Data is flowing Green: Connected at highest LAN speed, 1 Gbps Amber: Connected at 10 or 100 Mbps OFF: No Ethernet link detected
Online	Green	Blinking: Cable interface is acquiring IP, Time of Day, and configurationON: Cable modem/router is onlineOFF: Cable modem/router is offline
DS Downstream sync	Green <i>or</i> Blue	Blinking:Scanning for DS channelGreen ON:Synchronized on 1 channel onlyBlue ON:Synchronized with more than 1 channel (DS Bond mode)
US Upstream sync	Green <i>or</i> Blue	Blinking:Ranging is in progress.Green:Ranging is complete; operate on 1 channelBlue:Ranging is complete; operate on more than 1 channel (US Bond mode)OFF:Upstream channel is inactive
DS & US	Blue	Both DS and US blinking together: The cable modem/router is powering up or cable operator is performing maintenance
Power	Green	ON: power is supplied to the cable modem/router OFF: power is not supplied to the cable modem/router

Please note the following:

- > Do not block the modem vents in any way.
- Do not place the modem near a heating or air conditioning duct, in direct sunlight, anywhere susceptible to drastic temperature changes, or where it's very hot or very cold.

Troubleshooting Tips

Problem: I cannot access the Internet. What should I do first?

- **Solution:** Make sure that your Cable Modem/Router's MAC address is registered with your cable provider. When your provider's representative or setup software asks for your MAC address, you can find the CM MAC address on your modem/router's bottom label. If you are having a problem, you may need to check with your cable service provider to make sure the service provider set up its system properly for your cable modem.
 - Make sure your Cable Modem/Router's Power button is ON and that it's plugged into a live power outlet.
 - Check your Cable Modem/Router's Ethernet and coaxial cable connections. Make sure the coaxial cable is tightly connected. If a computer is plugged into an Ethernet port, make sure that the cable is plugged in all the way on both ends.
 - If you are using wireless, check that your wireless connection is functioning correctly. Check the section below, "I am having trouble connecting my computer or other device wirelessly to the Cable Modem/Router."
 - > Power off your modem/router for at least 10 seconds and then power it back on.
 - Restart your computer or other devices connected to the Cable Modem/Router. This ensures that they receive a correct IP address from the router.

Problem: I don't know my Cable Modem/Router's SSID or Password.

Solution: The default values are printed on the bottom label of the modem/router.

If you have **changed** these values, connect a computer to any Ethernet port of the modem, open the computer's Web browser, enter <u>http://192.168.0.1</u> into the browser's address bar, and press ENTER to go to that address. When the modem/router's user interface comes up, enter **admin** for both the username and password. Go to the Wireless section to find the SSID and password (also called Preshared Key or Passphrase).

Problem: What do I do if my cable service provider wants me to access the Configuration Manager?

- **Solution:** Make sure you have a connection between your computer or other device and the cable modem/router.
 - 1 On your computer, open a browser and type in the address **192.168.0.1** Enter

User Name: **admin** Password: **admin**

2 Now you will see status information about your cable modem/router and its connection that you can read back to your service provider.

Problem: What if I'm told that my Model 5352 cable modem/router isn't approved for my cable modem service?

- **Solution:** This modem has been certified by CableLabs and by Comcast, Time Warner Cable, Cox, Bright House, and other cable modem service providers. You can often find a list of certified modems on the Web site of your cable service provider. Beware of installers who try to get you to use their cable modem instead of a Zoom cable modem. Some of these installers provide bad information because they are misinformed or because they earn a fee for providing their cable modem. If the installer tells you that a cable modem provided by him or the service provider is "free", that's almost never true. When in doubt, check the cable service provider's Web site!
- In the unlikely event that you are told that your Zoom modem is not approved by your cable modem service, please email us at cableOK@zoomtel.com or call us at (617)753-0963.

• Approval information for CableLabs, Comcast, Cox, and CableOne[®] is available at www.zoomtel.com/cableOK

For additional Troubleshooting Tips see the User Manual at www.zoomtel.com/5352manual

If You Need Help

We encourage you to register your product and to notice the many support options available from Zoom. Please go to www.zoomtel.com/techsupport From here you can register your modem and/or contact our technical support experts and/or use our intelligent database SmartFactstm and/or get warranty information.

US: (617) 753-0963

Return of Defective Units

Please contact your local distributor or retailer for factory-authorized repair or replacement of your inwarranty defective product. If you are unable to reach your distributor or retailer, you can contact Zoom Factory Customer Service in the United States by calling: (617) 753-0023

Please note that you are responsible for any charges (including brokerage or customs and duties) associated with shipping the defective unit to Zoom for repair. During the first year Zoom will pay return ground shipping to the customer in the U.S. and U.K. After the first year you may be required to pay a shipping and handling fee. Any applicable customs, duties and brokerage charges to import the product are your responsibility.

Limited Warranty

Zoom Telephonics, Inc. (hereinafter "Zoom") warrants this product against defects in material and workmanship for a warranty period of 2 years. This warranty applies to the original end-user purchaser.

For all Zoom products other than software, Zoom will, solely at its option, repair or replace this product with a functionally equivalent new or factory-reconditioned product during the warranty period. The consumer will deliver the product to Zoom. All transportation risks and costs in connection with this warranty service are the responsibility of the consumer. After the first year of ownership, a small shipping and handling fee may be charged on units returned to Zoom.

Zoom will replace software at no charge if there is a defect in materials or workmanship for a period of 30 days from date of original retail purchase, provided the defective software is returned to Zoom. Shipments from Zoom will normally be via U.S. Mail. Software products supplied by Zoom are sold "as is," without warranty, either expressed or implied, as to function, application, merchantability, performance, and quality.

Zoom is not responsible for incidental or consequential damages, and is not responsible for damages resulting from the breach of any expressed or implied warranty. Zoom is not responsible for any costs of recovering, reprogramming, or reproducing any programs or data stored or used with the Zoom products, damage to property, and to the extent permitted by law, damages for personal injury.

This warranty is in lieu of all other warranties, expressed or implied. We do not assume or authorize assumption for us of any other warranty expressed or implied. Some states and countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusions may not apply to you.

This warranty does not apply if the Zoom product has been damaged by accident, abuse, lightning or other natural disasters, misuse or misapplication, or if it has been modified without the written permission of Zoom, or if any serial number has been removed or defaced.

This warranty shall not be applicable to the extent that any provisions of this warranty are prohibited by any federal, state, or municipal law that cannot be preempted. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state or country to country.

Safety Issues & Warnings

WARNING: Risk of electric shock. Do NOT expose to water or moisture.

- > The cable modem is a high-performance communications device designed for home and office environments.
- Do NOT use the cable modem outdoors. Keep the cable modem in an environment that is between 0°C and 40°C (between 32°F and 104°F).
- > To avoid overheating the cable modem, do **NOT** place any object on top of the cable modem.
- > Do **NOT** place the cable modem in a confined space.
- > Do **NOT** restrict the flow of air around the cable modem.
- > The manufacturer assumes no liabilities for damage caused by any improper use of the cable modem.
- > Make sure the voltages and frequency of the power outlet matches the electrical rating labels on the power cube.

FCC Statement

This device complies with Class B Part 15 of the FCC Rules. The device generates, uses and can radiate radio frequency energy and, if not installed and used as instructed, may cause harmful interference to radio communication. Only Coaxial cables are to be used with this device in order to ensure compliance with FCC emissions limits. Accessories connected to this device by the user must comply with FCC Class B limits. The manufacturer is not responsible for any interference which results from use of improper cables, or which results from unauthorized changes or modifications to the device.

UL Listing

This product is UL-Listed and complies with all applicable electrical and fire safety requirements.