

CABLE MODEM QUICK START

This Quick Start describes how to connect your Zoom cable modem to a cable modem service. This lets your cable modem provide Internet access to a computer or other device connected to the cable modem's Ethernet LAN Jack. If that device is a wireless router, wireless devices can connect through the router and Zoom cable modem to the Internet.

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 5341J**. 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 the Zoom cable modem's LAN jack.
- 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 the cable modem LAN jack and a computer's Ethernet jack. We recommend that you do this even if you later plan to connect the cable modem to a router.
- 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. If you want to connect your cable modem to a router, please continue directly below. If your cable modem is NOT working, see **Troubleshooting Tips** on the back of this Quick Start for help.

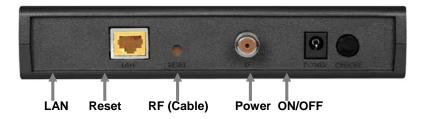
How to connect your cable modem to a router instead of a computer. This connection is optional, done after the cable modem is working with a computer.

- 1 The router should not be plugged in or powered up. If it is, unplug it.
- 2 Unplug the cable modem's Ethernet cable from your computer and plug it into the Router's WAN port.
- **3** Power-up the router. Make sure the modem's Power button is ON. Wait for the router to complete its power-up sequence.
- 4 The Link light of the modem should be lit to show the Ethernet connection. 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.) If the modem's front panel Power, DS (downstream), and US (upstream) lights do not stay on steady after a reasonable amount of time, please refer to Troubleshooting Tips.
- 5 Follow your router's instructions for setting up the router and connected devices.
- **6** Using a computer connected to the router, open the computer's browser and go to a website to check that the connection between your cable modem and router is working properly. If it works, **congratulations**! Installation is complete.

If the cable modem worked when connected to a computer but does not work when connected to a router, try the following:

- First try shutting down and restarting the router; if that doesn't help, then try shutting down and restarting each computer connected to the router.
- > Power cycle your cable modem and allow time for it to resynchronize with the cable system.
- You may also need to check that the DHCP client on the router's WAN port is enabled. If you need help, look in your router's manual or contact your router manufacturer.
- ➤ If that does not solve the problem, you may need to contact your cable service provider and give them the MAC address of the router's WAN port.

Cable Modem Rear Panel



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.

Front Panel LEDs

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



NAME	COLOR	MODE	STATUS
Power	Green	OFF	Power is off (power failure or disconnected)
		ON	Power is on
DS	Green	Flashing	Searching for a primary DS (downstream) channel
		ON	Primary DS (downstream) channel is connected
	Blue	Flashing	Negotiating a bonded DS (downstream) channel
		ON	One or more DS (downstream) channels are bonded
US	Green	OFF	Upstream channel is inactive
		Flashing	Searching for a primary US (upstream) channel
		ON	Primary US (upstream) channel is connected
	Blue	Flashing	Negotiating a bonded US (upstream) channel
		ON	One or more US (upstream) channels are bonded

Online	Green	OFF	Offline
		Flashing	Connecting
		ON	Online
Link	Green	OFF	There is not a live Ethernet connection
		Flashing	Ethernet data is flowing
		ON	There is a live Ethernet connection

Troubleshooting Tips

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

Solution: Make sure that your Cable Modem'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'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's Power button is ON and that the cable modem's power cube is plugged into a live power outlet.
- Check your Cable Modem's Ethernet and coaxial cable connections. Make sure the coaxial cable is tightly connected. Make sure that the Ethernet cable that connects a computer or router to your Cable Modem is plugged in all the way on both ends.
- Power off your modem for at least 10 seconds and then power it back on.
- Restart your computer or other devices connected to the Cable Modem. This ensures that they receive a correct IP address.

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.

1 On your computer, open a browser and type in the address 192.168.100.1 Enter

User Name: admin Password: password

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

Problem: What if I'm told that my Model 5341J cable modem isn't approved for my cable modem service?

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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

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 in-warranty 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.

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.

<u>UL Listing</u>

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

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.

Disclaimer

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