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 and may need the account number of your cable service. Your **MAC Address is printed on a label on the bottom of your modem and is called RF MAC**. Your service provider may refer to this as a CM MAC address or as a Cable Modem MAC address. Your account number can be found on your bill, or you can call your service provider and ask them for you account number. You need to provide this information when you order cable modem service, or when calling the cable company after installing your modem, or by filling out the account setup web page that appears when you first connect your cable modem to your provider’s network. 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 (yellow) 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. 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. First check that the wire in the center of the cable’s connector is centered, straight, and clean. If the coaxial cable has a screw-on connector, turn the connector clockwise when tightening the cable onto the Zoom 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:

- 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’s yellow 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 Go to “Now that your cable modem is connected, do this.” below.

Now that your cable modem is connected, do this.

It normally takes 5 to 30 minutes to establish an Internet link the first time a cable modem connects to a cable service provider. This allows the cable modem to connect to the appropriate channels for communication. You’ll see the DS, US, and/or Online modem lights on your cable modem flashing until the Online light stays steady green to signal success.

After the cable modem connects to your cable service provider, open your Web browser on the computer that’s connected to your cable modem. Then refresh the screen or try to go to a Web site. Many service providers, including Comcast, typically bring your browser to a registration page. In that case, follow the instructions on this registration page to register your modem.

If no web page appears after opening your browser, you need to call your cable company to register your modem. Below is a list of some major cable service providers’ phone numbers to call to activate your cable modem. Note that this list is subject to change.

<table>
<thead>
<tr>
<th>Provider</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comcast</td>
<td>1 (855) 652-3446</td>
</tr>
<tr>
<td>Cox</td>
<td>1 (888) 556-1193</td>
</tr>
<tr>
<td>Cable One</td>
<td>1 (877) 692 2253</td>
</tr>
<tr>
<td>RCN</td>
<td>1 (866) 832-4726</td>
</tr>
</tbody>
</table>
Once your cable modem is registered either online or through a conversation with someone at your cable service provider, your service provider will provision your cable modem service. Typically this takes less than 5 minutes, but in some cases this may take up to 30 minutes to complete.

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. *(The Blue US/DS LEDs blink during negotiation of bonded channels, and become solid when negotiation is complete. If after several minutes the US/DS LEDs continue to blink, this indicates partial service (at least one designated channel has not completed bonding). This does not generally affect performance, but your MSO may want to know so they can adjust their network.)*

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 off your cable modem, router and any computers connected to the router. Power on the cable modem and allow it time to resynchronize with the cable system. Once the cable modem is synchronized with its online light steady green, power up your router, then power up any computers connected to your router.
- 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**

<table>
<thead>
<tr>
<th>Port</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAN (Yellow)</td>
<td>Connect your Ethernet cable between this port and a computer or router.</td>
</tr>
<tr>
<td>Reset</td>
<td>Press this button for 5 seconds in the unlikely event that you need to restore factory default settings.</td>
</tr>
<tr>
<td>RF (Cable)</td>
<td>Connect your coaxial cable line to this port.</td>
</tr>
<tr>
<td>POWER (AC IN)</td>
<td>Connect the supplied power cube to this port.</td>
</tr>
<tr>
<td>ON/OFF</td>
<td>Push the button in to turn the power ON. Push the button again to turn the power OFF.</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>LIGHT</th>
<th>COLOR</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>Green</td>
<td>ON: Power is supplied to the cable modem/router</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OFF: Power is not supplied to the cable modem/router</td>
</tr>
<tr>
<td>DOWNSTREAM</td>
<td>Green or Blue</td>
<td>Green Blinking: Scanning for DS channel</td>
</tr>
<tr>
<td>Downstream sync</td>
<td></td>
<td>Green ON: Synchronized on 1 channel only</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blue Blinking: Negotiating bonded channel(s)†</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blue ON: Bonded with 1 or more channels</td>
</tr>
<tr>
<td>UPSTREAM</td>
<td>Green or Blue</td>
<td>Green Blinking: Ranging is in progress.</td>
</tr>
<tr>
<td>Upstream sync</td>
<td></td>
<td>Green ON: Ranging is complete; operate on 1 channel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blue Blinking: Negotiating bonded channel(s)†</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blue ON: Bonded with 1 or more channels</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OFF: Upstream channel is inactive</td>
</tr>
<tr>
<td>Online</td>
<td>Green</td>
<td>Blinking: Cable interface is acquiring IP, Time, and configuration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ON: Cable modem/router is online</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OFF: Cable modem/router is offline</td>
</tr>
<tr>
<td>LINK</td>
<td>Green</td>
<td>Blinking: Data is flowing and the Ethernet link is connected</td>
</tr>
<tr>
<td>Ethernet LAN port</td>
<td></td>
<td>Green: Connected</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OFF: No Ethernet link detected</td>
</tr>
</tbody>
</table>

† If Blue light blinks continuously, this indicates partial service (at least one designated channel has not completed bonding). This does not generally affect performance, but your MSO may want to know so they can adjust their network.
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. The CM MAC address is the same as the RF MAC address printed on the 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, 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?
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 SmartFacts™ 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 Technical Support in the United States by calling: (617) 753-0963

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 continental U.S. 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. warrants this product against defects in material and workmanship for a warranty period of 2 years. To read the full warranty, please see www.zoomtel.com/cablewarranty

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.

**Disclaimer**
Zoom Telephonics, Inc. (hereinafter “Zoom”) assumes no liabilities with respect to the contents of this document. Zoom also reserves the right to revise this document or update occasionally the content hereof without any obligation to notify any person of such revisions or amendments. Specifications subject to change without notice.