



CABLE MODEM/ROUTER WITH WIRELESS-N QUICK START

This Quick Start describes how to connect the Cable Modem/Router with Wireless-N to a cable modem service as an Internet gateway for computers and/or other local wireless or Ethernet-capable devices. More detailed information, including information about advanced features, is in the User Manual on the CD.

Package Contents

- Cable modem/router
- Power cord
- Ethernet RJ-45 cable
- CD with User Manual

Before Installing Your Cable Modem

Your cable service provider needs to know your modem's **MAC ADDRESS**, which is printed on a label on the bottom of your modem. You can provide this when you order cable modem service; or if you already ordered service, by calling the cable company BEFORE installing your modem. You may also be asked for your cable modem's model name and number, which is **ZOOM 5350**. If you need the modem's **serial number**, you can find it near the MAC address on the modem's label.

System Requirements

- 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.
- To use this Quick Start, you need a computer, an iPad™ or another tablet.

If your cable service provider provided a cable modem starter kit, please continue below. If you don't have or choose not to use the cable modem starter kit from your service provider, go to **How to connect to a computer if you don't have or choose not to use a cable modem starter kit**.

If your cable service provider provided a cable modem starter kit

Some cable service providers supply a cable modem starter kit that can be useful when you install your cable modem. The kit may include a coaxial cable for connecting between a wall jack and your cable modem. (These are also available at most electronics retailers.) The kit will include instructions, and may also include a CD with software. If you receive a kit like this, we recommend that you read the kit's instructions and use them to install your Zoom cable modem/router. This modem is DOCSIS 3.0 certified by CableLabs, and connects like a normal cable modem.

You will need to plug in the modem's power cord, connect to cable modem service using a coaxial cable, and then connect to a computer using either the included Ethernet cable or the wireless feature (see **Using the Cable Modem/Router to Make a Wireless Connection**).

Note: Please refer to the **Hardware Connection** section if you would like to see a diagram of the back of the cable modem and a description of the connections.

After you have installed your cable modem and it has synchronized itself with the cable network, your cable modem can connect your computer to the Internet.

Note: Allow 5 to 30 minutes to power up the first time because the cable modem/router must locate and connect to the appropriate channels for communication. You'll see the DS, US, and/or Online modem lights flashing until the Online light stays steady green to signal success.

Now open your browser and go to a familiar Web site to check that the cable modem is working.

- ❖ If you want to connect the modem/router wirelessly to some device, see **Connecting the Cable Modem/Router Wirelessly to Some Device**.

- ❖ If you want to connect additional computers/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 the Cable Modem/Router's Ethernet ports**.
- ❖ If you want to configure advanced options, please refer to the User Manual on the CD.

How to connect to a computer if you don't have or choose not to use a cable modem starter kit

- 1 Be sure your computer is on and the cable modem is unplugged.
Note: Please refer to the **Hardware Connection** section if you would like to see a diagram of the back of the cable modem and a description of the connections as you read the following steps.
- 2 Connect one end of the coaxial cable to the cable outlet or splitter. Connect the other end of the coaxial cable to the **Cable** connector on the rear panel of the cable modem. Hand-tighten the connectors to avoid damaging them.
 - You can connect a coaxial cable between an open cable service wall jack and the cable modem. (If no wall jack is available, you can use a coaxial T connector or splitter.)
 - Alternatively, there may already be a coaxial cable that is connected to service and that has an open end for connecting to the cable modem.
- 3 Plug the power cord into the **AC IN** connector on the rear panel of the cable modem and into the electrical outlet. This turns the cable modem on. Check if the **Power** LED lights up.
- 4 For initial setup we recommend that you connect the provided Ethernet cable to any **Gigabit Ethernet** port (GE / LAN 1, 2, 3, or 4) on the rear panel of the cable modem/router and connect the other end to the Ethernet port on your computer. If you want to connect your computer wirelessly instead, see **Connecting the Cable Modem/Router Wirelessly to Some Device**.

Note: Allow 5 to 30 minutes to power up the first time because the cable modem must locate and connect to the appropriate channels for communication. You'll see the DS, US, and/or Online modem lights flashing until the Online light stays steady green to signal success.

Now open your browser and go to a familiar Web site to check that the cable modem is working.

- ❖ If you want to connect the modem/router wirelessly to some device, see **Connecting the Cable Modem/Router Wirelessly to Some Device**.
- ❖ If you want to connect additional computers/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 the Cable Modem/Router's Ethernet ports**.
- ❖ If you want to configure advanced options, please refer to the User Manual on the CD.

Please note the following:

- Do not block the modem/router vents in any way.
- Do not use the modem where it's very hot or very cold.
- Place the cable modem/router in a vertical orientation (using the "feet" at the bottom of the unit to create a stable placement). The Power LED on the front panel should be at the top of the unit.

Hardware Connection



Port	Description
GE 1-4 (Gigabit Ethernet 1-4 also known as LAN 1-4)	Four 10/100/1000 auto-sensing RJ-45 ports. Connect devices on your LAN (Local Area Network) such as a computer, hub or switch to these ports.
USB	The USB port is for manufacturer's use only.
RESET	Use this button 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.
Cable	Connect your coaxial cable line to this port.
AC IN	Connect the supplied power cord to this port.

Connecting the Cable Modem/Router Wirelessly to Some Device

Your cable modem/router has wireless-N for WiFi® compatible connection to your computer and/or other devices. The cable modem/router comes set up by default with WPA/WPA2 security, and this can be changed if you like.

For those computer(s) and/or device(s) that support WPS, see **Using WPS to set up your wireless network**. (Windows 7 SP1 (Service Pack 1) or the latest updates, or Windows Vista SP2 (Service Pack 2) support WPS.) For those computer(s) and/or device(s) that do support WPA/WPA2 but that don't support WPS, enter the default SSID and Pre-Shared Key below in the wireless network portion of the device's configuration menus.

Note: Typically, tablets like the iPad and e-readers don't support WPS but do support WPA/WPA2.

Default Wireless Security Settings

The **default SSID** is: ZOOM
 The **default Pre-Shared Key** is: zoom#### where #### represents the last 4 characters of the **Cable MAC address** of the unit, which can be found on the label on the bottom of the cable modem/router.

Note: If you want to change the default SSID and Pre-Shared Key, please refer to the User Manual on the CD for instructions.

In the unlikely event that one or more of your devices only supports WEP security, please refer to the User Manual on the CD for instructions on how to configure WEP security.

Using WPS to set up your wireless network

If all the WiFi compatible wireless devices on your network support WPS:

- 1 Press the **WPS** LED pushbutton on the front panel of the router for 5 seconds. The WPS LED should blink green.
- 2 Within 2 minutes (before the WPS LED light turns off), press the WPS button on the device that you're linking wirelessly to the modem/router. The button may be a physical pushbutton on the device or a button on a page of the device's wireless network configuration menus.
- 3 **Congratulations!** You should now have a secure connection between the router and a device. Now is a good time to check that your device's Internet connection is working. Open your browser and go to a familiar Web site. If you are able to connect, continue with the next step below. If you are not able to connect to the Internet, go to **Troubleshooting Tips**.
- 4 If you have other devices whose WPS security you need to set, repeat steps 1 through 3 for each device. When they are all set, go to step 5.
- 5 Your basic setup for local wireless devices is complete.

Note: If you want to change the default SSID and Pre-Shared Key, please refer to the User Manual on the CD for instructions.

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 an available Ethernet (GE 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**.
- 6 **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.

Gaming

If you are using your cable modem for gaming, you may need to make changes to the cable modem's firewall setting for the game to work. This can be done by setting up a DMZ or using port triggering. Please see the User Manual on the CD 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**. Then refer to the User Manual on the CD for information about all the options on the cable modem/router menu.

Logging in to the Zoom Configuration Manager

Step 1: Connecting the Router to a Computer

- 1 Connect the router to a computer following the instructions under **How to connect to a computer if you don't have or choose not to use a cable modem starter kit**. Then continue to **Step 2** below.

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 **Enter Network Password** 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. Please refer to the User Manual on the CD for instructions.

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
Power	Green	ON = power is supplied to the cable modem/router OFF = power is not supplied to the cable modem/router
DS Downstream sync	Green	Blinking = scanning for DS channel ON = synchronized on 1 channel only
	Blue	ON = synchronized with more than 1 channel (DS Bond mode)
US Upstream sync	Green	Blinking = ranging is in progress ON = ranging is complete on 1 channel only
	Blue	ON = ranging is complete; operate with more than 1 channel (US Bond mode)
DS & US	Green	Both DS and US blinking together = operator is performing maintenance
Online	Green	Blinking = cable interface is acquiring IP, ToD, CM configuration ON = cable modem/router is operational OFF = cable modem/router is offline
USB	Green	Blinking = data is flowing ON = USB device is connected OFF = no USB device connected
Wireless	Green	Blinking = data is flowing ON = configured to 802.11g only or 802.11b/g auto mode OFF = WiFi is disabled
	Blue	Blinking = data is flowing ON = configured to 802.11n only or 802.11b/g/n auto mode OFF = WiFi is disabled
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 WiFi client associated with the cable modem/router via WPS

Rear Panel LEDs

GE / LAN 1-4	Green	Blinking = data is flowing ON = connected at 1 Gbps OFF = no Ethernet link detected
	Amber	Blinking = data is flowing ON = connected at 10 or 100 Mbps OFF = no Ethernet link detected

Troubleshooting Tips

Problem: I cannot access my Internet service or send or receive email.

Solution: The following front panel lights on the cable modem/router – **ONLINE**, **US** (upstream), **DS** (downstream), and **POWER** – must be solidly lit before your modem will let you connect to the Internet. If they are not:

- Check all modem connections (power, Ethernet, and cable modem line).
- Unplug your cable modem/router and then plug it back in.
- Restart your computer.
- Check to see that your cable TV is working.
- Check with your cable service provider to make sure that high speed access is available and running.
- In rare instances, the cable signal may be weak or noisy. If this is the case, call your cable service provider.
- If you are using your PC's Ethernet port, check that this port is functioning correctly. If you are using wireless, check that your wireless connection is functioning correctly. Refer to its documentation if necessary.
- Check that your Web browser is configured correctly. It should be set to use a network connection (this might be called a Local Area Network or broadband connection).
- Check that your computer's network settings are configured correctly. A Windows computer should have a local area connection that should normally be Internet Protocol version 4, Internet Protocol version 6, or TCP/IP; not AOL, Dial-up, or Adapter. A Macintosh computer should be configured for Built-in Ethernet, and TCP/IP should be set to Using DHCP.

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 router** and/or **contact our technical support experts** and/or use our intelligent database **SmartFacts™** and/or get **warranty** information.

US: (617) 753-0963

UK: London: +44 2033180660

UK: Manchester: +44 1618840074

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.

Regulatory Information

FCC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against radio interference in a commercial environment. This equipment can generate, use and radiate radio frequency energy and, if not installed and used in accordance with the instructions in this manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures are necessary to correct the interference. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

For product available in the USA/Canada market, only channel 1-11 can be operated. Selection of other channels is not possible. This device is going to be operated in 5.15-5.25GHz frequency range, it is restricted in indoor environment only.

IMPORTANT NOTE:

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

Note to CATV System Installer - This reminder is provided to call the CATV systems installer's attention to Section 820-93 of the National Electric Code which provide guideline for proper grounding and, in particular, specify that the Coaxial cable shield shall be connected to the grounding system of the building, as close to the point of cable entry as practical.