MACHLINK QUICK START GUIDE

Need help? Contact our Helpdesk at (563) 263-2631

We're here for you...

We have designed this Quick Start guide so that you can begin enjoying your MachLink® Internet service as quickly as possible. If you are unable to connect to MachLink, call the MachLink® HelpDesk. You will be connected to a specialized technician at our central support desk who can diagnose the problem. You will be asked a series of standard questions that will help the technician pinpoint the problem. The MachLink® HelpDesk can address many of your problems over the telephone. You can also email any questions or issues to MachLink®.

Remember, we're here for you!

MachLink® HelpDesk

Phone: (563) 263-2631

Email: helpdesk@machlink.com

Troubleshooting Tips for Vista

Can't Get Online?

There are some things that you can do to start troubleshooting your own connection if necessary. Just start at the top and work your way down as far as you can; this troubleshooting checklist is used in the HelpDesk as well.

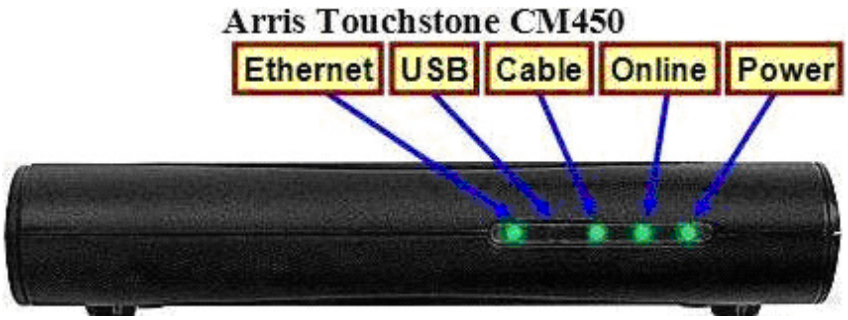
Physical Troubleshooting

1. **If you have a second computer** and any of the computers sharing the Internet connection are working, then your problem is with your home network and you should contact your home network installer.

   If we provided your home network, then continue down the troubleshooting checklist.

2. **If the two lights closest to the end are Power and then Online**, your modem is a CM450 (see below) and has a Standby switch on the end. You may have accidentally activated the Standby button.

- **If the Power light is green and solid but the Online light is green and slowly flashing** on and off - about once a second - push the Standby button one time. You should now see both the Power and Online lights green and solid.
- **If this modem is working properly**, your lights should show...



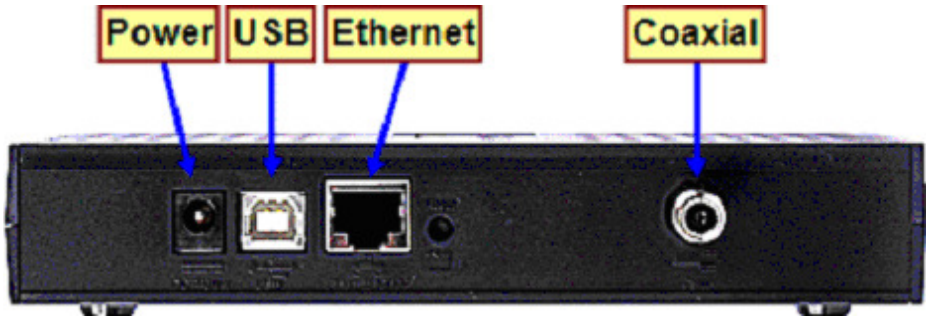
  - Power & Online: green and solid
  - Cable: green and solid most of the time...should flash occasionally
  - USB & Ethernet: One should be off and the other should be green and flickering fast
- If your lights indicate that the modem is not working properly, give us a call at 563-263-2631.

3. **If the two lights closest to the end are Power and then DS**, your modem is a CM550 (see below) and has no Standby switch. If the modem is working properly, your lights should show...

  - Power, DS, US, & Online: green and solid
    - Link: green and flashing on and off about two times per second
  - If your lights indicate that the modem is not working properly, give us a call at 563-263-2631.

4. Has the internet worked before, where the PC, modem, and/or router are currently located? If not, is it a new install or have the PC, modem, and/or router recently been moved? In either case, give us a call and we'll start troubleshooting from here. The location may be the issue.

- How many cables are plugged into the back of the modem?



You will only ever need three cables plugged in. The power and coaxial will always be plugged in for the modem to work properly. The only option is whether you use USB or ethernet. You should always use ethernet – which looks like an over-sized telephone connector – whenever possible. The majority of laptop and desktop computers built in the last five years – whether Macintosh, Linux, or Windows – will have one or more ethernet ports. If you wish to use ethernet and your computer doesn't have a port, you can pick up a very easy-to-install ethernet card for as little as $10, locally.

If you have four cables plugged in, remove the USB from the modem and your computer and then put it away: see the explanation above for detail.

If you have three or fewer cables plugged in, make sure that the coaxial and power cables are plugged in. Now make your third – running from the modem to your computer – the ethernet cable. If you cannot use the ethernet cable, use the USB. If you cannot plug in either one, you will probably want to acquire an ethernet card.

5. Is your modem hooked directly into your PC? If in doubt, trace the networking cable – whether ethernet or USB – from the middle of the back of the modem and note what the other end is plugged into. If you find it hanging free, note that instead. To trace that cable:
    1. Start at the back of the modem and reseat the end of the cable.
       To reseat an ethernet cable...
        1. Unplug the cable from the modem.
        2. Immediately plug the cable back into the modem.
        3. Gently wiggle the plug to make sure it is firmly in the socket.
    2. Start at the modem and – using your hands, if possible – trace the networking cable from the end plugged into the modem to the opposite end.
        - Is the other end of the ethernet cable hanging free? Plug it into the back of your PC. Make sure to gently wiggle the plug to make sure it is firmly in the socket.

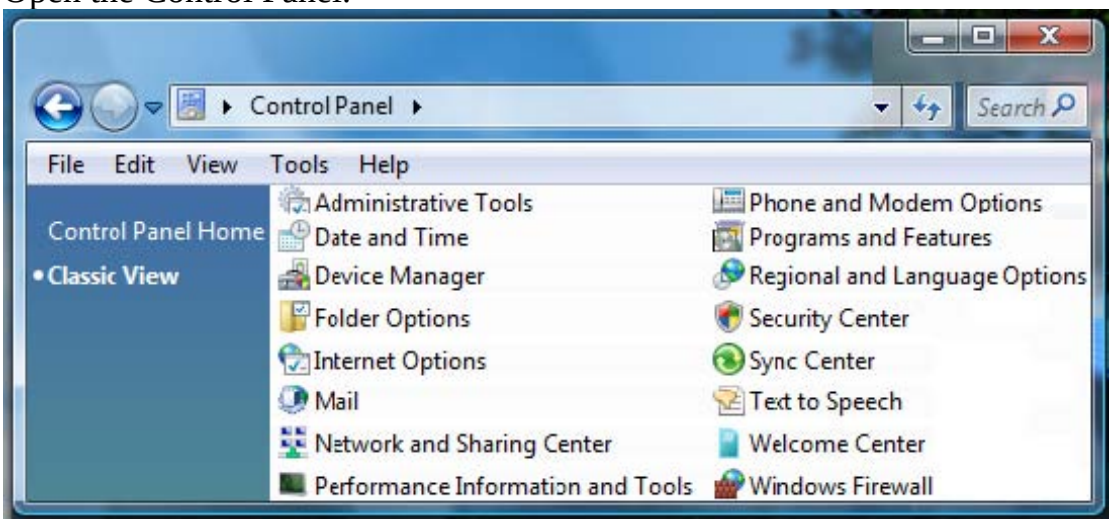
- If your PC is too far away for the modem's ethernet cable to reach, look for a router near your modem. The router will probably be slightly larger than your modem, may have up to four (wired) ethernet ports in the back, and will almost certainly have one or two antennae (see a couple examples, below).

  Plug the free end of the modem's ethernet cable into the back of the router. If your router has multiple ethernet ports, all but one of them will be numbered: plug the modem's ethernet cable into the non-numbered port and then gently wiggle the plug to make sure it is firmly in the socket.
  Take note for future troubleshooting as to how your modem is connected: to your computer or to a router.

- **Do you have a router?** If you see cables plugged into the back of your router other than the one coming from the modem, you should now do a cable trace – for each other ethernet cable – from your router to any other device plugged into it.
  Take note for future troubleshooting how many computers are connected to your router, and how each is connected (wirelessly or with an ethernet cable).

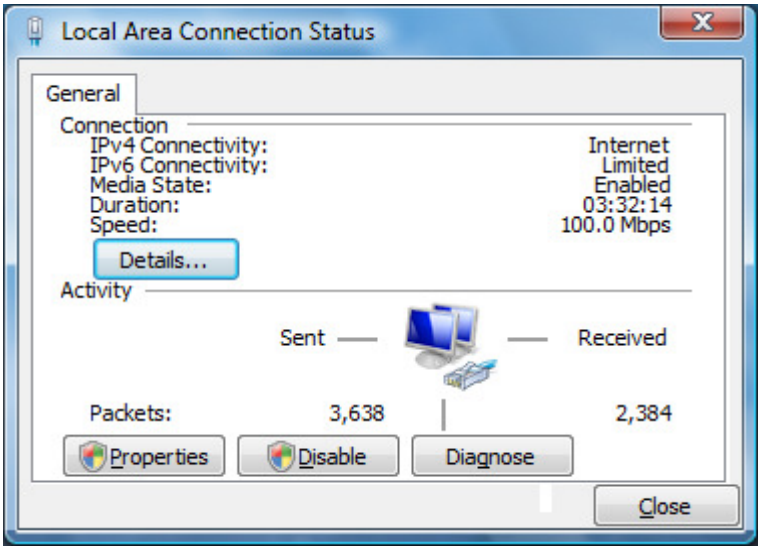
Troubleshooting on your Computer

1. Open the Control Panel.

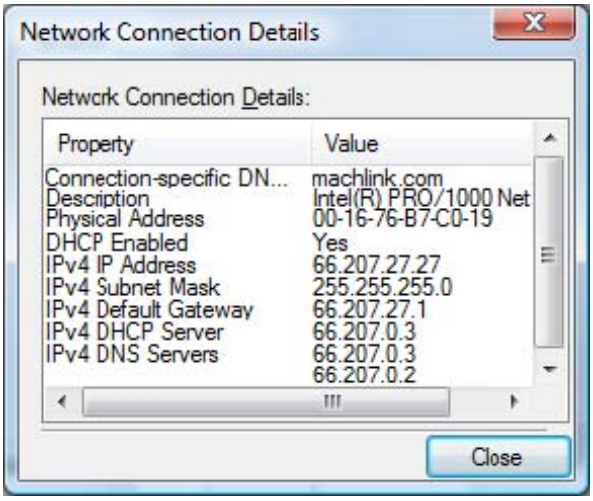


2. Choose Network & Sharing Center.
3. Under ***Network & Sharing Center***, select Manage network connections from the *Tasks* panel on the left side of the page.

4. In the Local Area Connection Status window, make sure that your *Media State* is `Enabled.`



5. Click on Details.

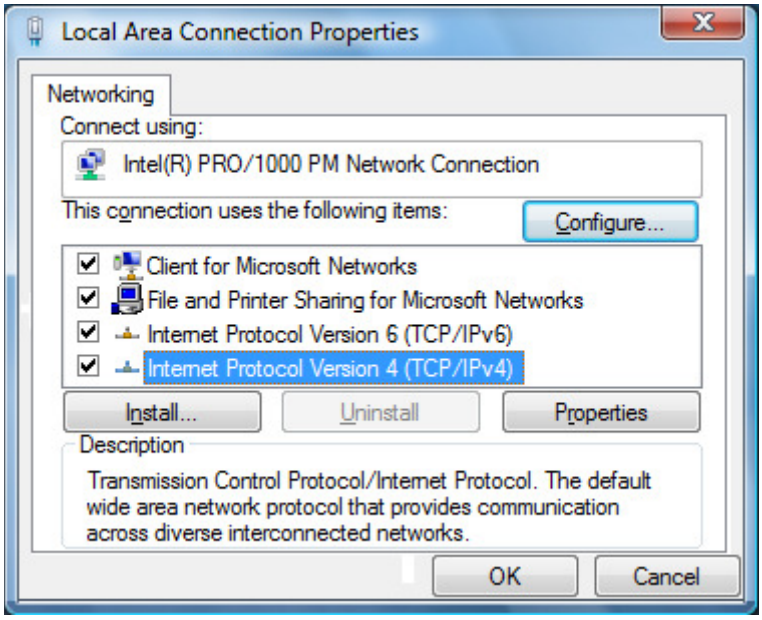


6. From this window, note the values for...
   - *DHCP Enabled*: should be `Yes`
   - *IPv4 IP Address*: **If your computer is hooked directly to the modem** - i.e. you don't have a router - this should start with either `66.207...` or `69.207...`
   - *IPv4 Subnet Mask*: will usually be `255.255.255.0`. It doesn't mean disaster if this isn't `255.255.255.0`, but definitely mention this fact if you have to call in to the HelpDesk for guided troubleshooting.
   - *IPv4 Default Gateway*: Take your IP Address (see, above) and replace the numbers after the third period with the digit `1`. In the reference picture above, the IP Address is `66.207.27.`**`27`**. A computer with this IP should, therefore have *Default Gateway* of `66.207.27.`**`1`**
   - *IPv4 DHCP Server*: should be `66.207.0.3`

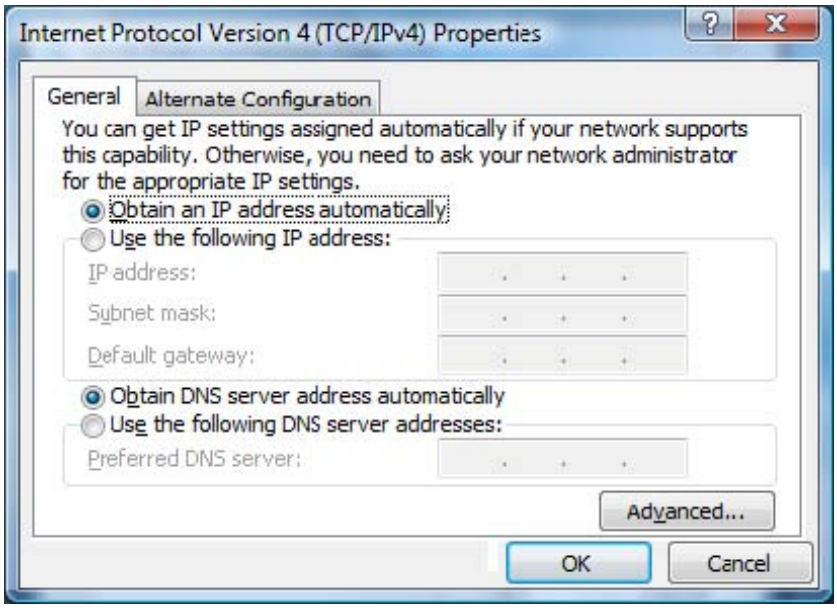
- *IPv4 DNS Servers*: should have at least two...`66.207.0.2` and `66.207.0.3`

7. Click on Close.

- If *DHCP Enabled* was not `Yes` then...
  1. Click on the Properties button. This will get you the window shown below. Note that if you don't see *Internet Protocol...(TCP/IPv4)* listed, you may need to scroll down; it should be the last item on the list.



  2. Select Internet Protocol...(TCP/IPv4) by clicking on its name - we want the check-box in front of it to remain checked - and then click on the Properties button just below. This will get you the window shown below. Confirm - for both the *General* and *Alternative Configuration* tabs - that your settings look like they do in the picture below.



3. Click on the OK button to close the *TCP/IPv4 Properties*, then click on OK to close the *Local Area Connection Properties.*

4. Click on the Diagnose button.

- On the other hand, if you have a valid IP (one that doesn't start with “169...” and you have a Default Gateway, the issue may be your security software.
    1. Turn off your firewall.
    2. Wait 30 seconds.
    3. Try to browse the Internet again. If this works, then your firewall security was the issue; contact whoever makes your firewall.
    4. Turn off your anti-virus software.
    5. Wait 30 seconds.
    6. Try to browse the Internet again. If this works, then your security software was the issue; contact whoever makes your anti-virus.
    7. If we’ve gotten to this point and your still can’t browse, the next step is to turn your security back on and then call one of the local computer repair shops: you may, unfortunately, have an infestation.
- Try a 30-second power cycle.
    1. Do a full shut-down (not just a reboot) of any PCs using this connection.
    2. If you have a router, unplug its power cable.
    3. Unplug the modem's power cable.
    4. Once everything is powered down, wait 30 seconds.
    5. Plug in the modem's power first, then plug in the router's power (if you have one) and, finally, turn on any PCs using this connection.
    6. Once each PC is done loading, try to browse the Internet using your preferred browser (Internet Explorer, Firefox, Opera, etc.).
- If you only have one PC, and that PC works, you're back online! Congratulations!
- If you have more than one PC and any of them work, then your issue is not with your Internet connection but with your home network; you will need to contact your home network installer. If we provided your home network, then give us a call at 563-263-2631 and we will be glad to assist you.