

"Tech-Talk" ~ Information to help inform our subscribers ~

Do devices become obsolete the moment you take them out of the store??

TVs are now Smart? I can Stream without getting wet?!

Technology can be difficult to keep up with. Recent queries from our subscribers indicate that it might be time to share some "tech-tips" and insights. Many variables can affect your wireless signal. We've listed some of the main points to consider and hope that you find them helpful.

Tip #1: Do you know. . . your type(s) of wireless device, the number of devices you normally use and how you utilize them can affect your wireless network?

Riondel Cable Society sells you "Internet Access". We work hard to ensure this service is the best it can be. Getting Internet to your home is our job. We provide cable modems with a built-in router designed for basic WiFi needs. It then comes down to you. What internet package did you get? How much data do you use? How many devices do you connect? Have you thought about connecting your work computer and smart TV to the router using an Ethernet cable? Do you need a better WiFi router?

In the following tips we look at what can limit the range and strength of your wireless network inside your home. We set out the facts to be aware of and offer solutions you may wish to implement to get the most out of your WiFi. Welcome to WiFi 101!

Tip #2: Do you know. . . your residence could affect your WiFi?

Interior wall construction may impact your WiFi signal. WiFi connectivity between rooms is generally better when interior walls are timber and drywall stud. Foil-backed drywall and walls made of brick, concrete or stone make matters worse. With these types of walls, your WiFi signal level may be much weaker than normal if your router is in a different room than your wireless devices.

What's in your interior walls can significantly impact the strength of your WiFi signal between rooms.

Tip #3: Do you know... your router's location may negatively affect your WiFi signal?

A basic wireless router has an indoor range of 46 meters (150 feet), typically enough range for the average house. If your WiFi router is down in the basement or up in the attic – this may prevent or interrupt your WiFi signal from reaching devices on different floors. Ultimately, we can never guarantee that a particular router with built-in WiFi will be able to cover a given property.

Place your wireless router in the most centralized location to provide for optimum signal strength, to reach all parts of your home.



Tip #4: Do you know...you might get a better result if you use a network cable?

If reliability and maximum performance are required (work/business use or online meetings) an Ethernet cable is the best method of delivery. <u>Wired</u> connectivity is always more reliable and faster than <u>wireless</u> connectivity. AND every device moved to a cabled connection with its wireless interface properly shut down, is one less device tying up the wireless channel. SO moving all the devices you possibly can onto wired connections may actually benefit any devices left on WiFi.

Tip #5: Do you know. . . what could interfere with wireless signals?

WiFi networks utilize radio frequencies to send/receive data. Radio signals from other household equipment may weaken or interfere with your wireless signal (such as: microwave oven, wireless audio equip, external monitors, baby monitor, wireless camera, RF video transmitters, cordless phones, a satellite TV receiver or nearby power lines). Signal interference might look like: wireless devices show a low signal rate; difficulty pairing Bluetooth devices; internet connection keeps dropping; or a much slower WiFi connection. Turn OFF all devices sending out wireless signals, one by one. Then see if there is a difference in the signal strength as you turn ON each device. If you find a device that is interfering, you may have to move it further from the router. In general, it is better to limit how many wireless devices in use in your home at any given time.

Tip #6: Do you know your bands. . . 2.4 GHz vs 5 GHz?

WiFi signals are simply radio signals. Higher frequencies travel faster, but have a shorter range, while lower frequencies travel further but at a slower rate. The frequencies you use can have an impact on your WiFi signal strength and range. Your router is likely using the most common, either 2.4 GHz or 5GHz.

- **2.4 GHz is the** original standard for WiFi. Significantly more devices in the world today support 2.4 GHz than in previous years. An increased amount of devices all on the same channel results in "traffic congestion" as these devices transmit. This diminishes the performance and reliability for everybody. Too many wireless devices utilizing a single frequency means that there is less available bandwidth something to be aware of with 2.4 GHz. Less available bandwidth results in slower bandwidth speeds. On the other hand, 2.4 GHz tends to travel through solid objects (like brick and concrete walls) somewhat better than 5 GHz. **Use 2.4 GHz if your device is in another room or far away from your router, and limit the use of other WiFi devices if necessary.**
- **5 GHz is a** <u>later</u> **standard.** As a result, fewer devices support it, meaning it is a less congested band. You may want to upgrade to 5 GHz, which is much better for media streaming and heavy bandwidth usage. If you do, make sure your modem is in a centralized location, preferably in the same room as your wireless device(s). With 5 GHz, the signals transmitting from one room to another will be weaker. **Use 5 GHz if your device is close to your router.**



Tip #7: Do you know. . . each device being used takes up bandwidth space? Whether you use 2.4 GHz or 5 GHz, devices that use large amounts of your bandwidth (https://distriction.org/nices.com/highway) can cause slow-downs for other devices, appearing as poor signal strength (https://distriction.org/nices.com/highway) or contributing to increased data usage (over-usage). Try reducing the number of devices you have eating/plugging up your Internet's bandwidth at any one time.

Activities like downloading music, viewing movies and playing games can quickly lead to overuse. For example, watching YouTube uses approximately 125 MG/hour. Sharing sites or sites using torrent-style programs are "bandwidth hogs." You can modify your account settings within these programs to reduce your data usage. Tips on monitoring and reducing your usage are on our website (https://bluebell.ca) under "Services" – when this menu appears, click on "WiFi Info" and scroll down to "Internet".

Tip #8: Did you know... you can create an account to check internet usage?Riondel Cable Society offers a "portal" account for our subscribers. You can use the portal account to check your internet usage before or after using the internet to determine how much bandwidth you are using. This is very useful if you think your internet use has been greater than "usual" or you have had company using your internet.

Directions to set up your portal account to monitor your internet usage can be found on our website (https://bluebell.ca) under "Services" – click on "Internet" and scroll down to the link under "To check your internet usage".

If you have any problem, or need to reset your Account, please contact the Riondel Cable Society at 250-225-3433 or e-mail @ riondelcable@bluebell.ca

Summary: We hope our members find this information to be of value. The always changing world of technology may present challenges or require new skill sets. The Volunteers at Riondel Cable Society will continue to work hard to ensure your internet service is the best it can be. No guarantees, but we will always try our best to help our members keep up with the new developments on the Internet side.