

With many of you currently working from home, the need for great Wi-Fi and Broadband is more important than ever before.

Add home schooling into the mix and low quality Wi-Fi and Broadband can be a recipe for disaster! However, there are many cheap or free thing you can do to improve your broadband speed and make sure your lockdown home working experience doesn't fall at the first hurdle.

We've put together a list of handy tips and tricks to have a look if you are having problems.

1. Perform a speed test

The very first thing you might want to try is a speed test. It's really easy to do, won't cost and should only take a minute.

Visit https://www.speedtest.net and click 'Go' to run a speed test.

You can hardwire into your router by connecting a network cable to the router from the PC/laptop you are using. This will avoid the Wi-Fi and give you a benchmark of what your internet connection can achieve.

Then unplug the cable and run a speed test when connected to the Wi-Fi and compare the results.

Wi-Fi connections will always be slower and less reliable than a hardwired connection. If you are using a phone or tablet, there are several apps in the App Store and Google Play which you can use to perform this test.

If you are unsure about what speeds you should be receiving, speak to your current internet provider.

2. Relocate your router*

Not all routers handle your wireless connection but for ones that do, the location of your router can make a massive difference to the quality of your signal. The closer your router is to your PC or Laptop, with a clear line of sight, the better your wireless signal will be.

Position your router centrally in your home so that its signal can reach all of your rooms or, at the very least, close to where you will want Wi-Fi coverage. Generally we'd recommend you also put it high up, such as on a shelf. Don't locate the router in a cupboard, it needs to be in the open and free from obstructions.

* This only applies if your router handles your wireless, as some routers don't.

3. Move potential interference

Whilst trying to figure out the best location for your router, don't forget that many of your appliances in your home can interfere with Wi-Fi.

Items such as TVs, fridges, Bluetooth devices, other wireless routers, cordless phones, microwaves and bizarrely even your fish tank can interfere with your Wi-Fi. All of these can potentially slow down its speed and accessibility.

Basically, try to keep your router away from other electrical devices and large metal objects.

4. Are you using a Microfilter?

Microfilters stop Broadband and voice signals interfering with each other. If you are not using one, you are likely to experience connection issues.

The exception to the rule is if you have had a new BT master socket installed they can have an inbuilt Microfilter. We always recommend having the router connected to the master socket using a Microfilter.

Microfilters must be used on each phone socket located at your property. They are inexpensive and can be purchased from most good electrical stores or online.

5. Update the firmware on your router

Have you upgraded you router recently? It you haven't you could be missing some important firmware updates that will improve performance.

The process of downloading updates differs depending on the model of router but you can check your manual or a simple Google search will point you in the correct direction.

6. Change the router's wireless channel

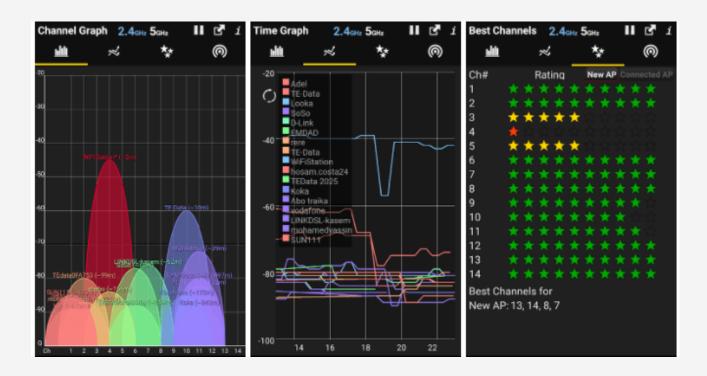
It's worth looking at switching the channel of your router, it's slightly more technical to do but can boost your speed.

Wireless frequencies have multiple channels and these channels can overlap.

Overlapping channels can cause interference resulting in bottle necks and ultimately poorer performance.

Changing to 5GHz would mean there will be no overlapping but not all devices support this.

To find the best channel for your router, you can download an app such as Wifi Analyzer on Android or Netspot for iOS.



7. Should I password protect my Wi-Fi?

The answer is an emphatic yes. If you don't then anyone could access your Wi-Fi and be using it, even your next door neighbour and their kids! No wonder it's been slow!

To find out if it's secured, search the available networks on your device and if a padlock appears next to it then it's password protected.

It's definitely worth checking what devices are connected from time to time to make sure there is nothing on there that you don't recognise.

8. Position the antenna upward for a better horizontal reach, or sideways for vertical reach

In you live in a multi-storey home, positioning your router's antenna sideways can help you get a better signal upstairs. Pointing an antenna up helps the router reach further laterally.

If your router has two antennas, take care of all possibilities by pointing one antenna up and the other to the side. And if you've got a router without any antennas, make sure you stand it the way it's made to go. That is, don't lay a vertical router on its side.

9. Swap your router for a better model

Do you have a router that you have had for a considerable amount of time or do you have a cheap one?

In either of these cases the best solution would be to replace it. Some older routers, even ones not that old, may have outdated technology so performance could be an issue.

Look out devices which are 'Wireless AC' or '802.11AC Wireless' (This is an up to date Wi-Fi standard).

Dual-band Wi-Fi is also a very useful feature to have and routers with this broadcast on both 2.4GHz and 5GHz frequencies. 5GHz copes better with interference but 2.4GHz has better range.

Finally, make sure that the router is secure, WPA2 is the minimum standard of Wi-Fi security we would recommend.

10. Purchase additional access points, a Wi-Fi extender or repeater

Additional wireless access points, an extender or a repeater can help boost your Wi-Fi signal around your home or office to reach those areas furthest away from your router.

Some features are not compatible with all routers. Check the features you want to use are compatible before purchasing.

11. Contact your service provider

Finally, if all of the above fails, contact your broadband provider.

They should be able to offer specific advice based around the brand of router you have and the speed you should expect from them.