

What you can do with different types of broadband

Credit: OFCOM

Reliable broadband has become an absolute essential. A slow broadband connection can make life difficult - and it's especially frustrating to have to pay out every month for speeds that you'll never be able to fully enjoy.

Some problems may be difficult to fix, but there's also plenty you can do to improve things from the home. Taking a few simple steps to help maximise your download speeds, and ensure your broadband can run as smoothly as possible, could make all the difference.

1. Test your broadband speed

Find out just how slow your connection is by using our free **broadband speed checker**. Plugging your computer directly into the router will give you the most accurate reading for the speed of your broadband and will help you work out if slow speeds are caused by a poor wi-fi signal.

This will tell you the actual download speed you're receiving – you can then see if this improves once you've followed the other advice in this guide. If it doesn't, you can quote your speed readings when contacting your provider to complain.

Remember, a low speed reading doesn't necessarily mean that the speed into your house is slow or that your provider isn't delivering the speeds that it promised. It could be that the setup in your house is slowing down your signal. The tips in this guide can help minimise any such interference.

2. Find the best position for your router

If, like most people, you use a wi-fi network to connect your computing devices to your router, then you need to position your router where it can be most effective. You'll get the best coverage if you're able to place it somewhere central.

If you put it next to a window, then half of your signal will be sent outside. Lots of other things can impact the strength of a wireless broadband signal:

- walls and radiators
- interference from electrical equipment such as microwaves, speakers, TVs or baby monitors
- bodies of water like a fish tank

Your best bet is to stick your router high up where the signal won't be impeded – on top of a bookshelf, for example. Never put it in a cupboard, or behind a TV or fish tank.

3. Keep your router switched on

Some people turn their routers off when they're not using them. Don't – when you switch it off, it makes it appear that your broadband is disconnecting. This makes the line look unstable and can lead to your speed being automatically reduced to make the line more reliable.

4. Consider a wired connection

If you don't need a wireless network – for example if you only connect to the internet from a single static device, such as a desktop computer – then use a wired connection. This can also give faster speeds than wireless.

5. Crowded wi-fi? Change the channel

If there are a lot of people using the same wireless channel in one area, it can slow your connection. Some routers have a special button that will allow you to change channels – check your manual. Otherwise, you can reset your router by turning it off, waiting a couple of minutes, and turning it back on again. It should pick a different channel for you.

Also consider if you're crowding your own wi-fi channel – this can happen if you have lots of devices connected to wi-fi at the same time, even if you're not actively using them. Try switching off wi-fi on a few other gadgets that are sitting idle to see if it helps.

6. Use the correct sockets

Try to connect your router to the master socket (the one where your BT phone line comes into the house) if you've got more than one phone point in your house.

If you do have multiple phone sockets around your house and the faceplate on the master socket just has one connection point, then you'll need to connect a microfilter (a small white box with a phone lead or connector on it) for every phone or fax that you've plugged in. If you need one, consider getting a spare as they tend to wear out.

7. Don't use extension cables

Don't connect your router to the master socket using a long telephone extension lead. Instead it's much better to move your router closer to the master socket, enabling you to connect it with the supplied lead. If you then want to run a wired connection from your router to your device you should use a more efficient ethernet cable. These don't cost much (typically around £1 a metre) and are available from most electrical stores.

If you really can't move your router, then you should use a good quality ADSL extension cable, rather than a telephone extension lead, to connect it to the master socket. You can also consider a **powerline adaptor**.

8. Update your hardware

Upgrading your wireless broadband router could make a real difference to the speed of your broadband connection, especially if your current router is a few years old. Old equipment can also be a security risk - if your router is no longer being supported with important updates, it might not protect you from emerging cyberthreats.

So for both speed and security, if you've been with the same provider for ages, get in touch with your provider to ask whether they've updated their equipment. If they have, ask to be sent a new one.

9. Get a wi-fi boost

Consider investing in a booster if wireless range is a problem. There are a few options that work for different homes.

The cheapest are wi-fi extenders, which cost around £20 and take your existing wi-fi connection and re-broadcast it for a stronger signal further from the router. They won't improve speed very much or reach particularly far but can be good for dead zones.

Powerline or homeplug adaptors are also easy to set up. They use the mains electricity cables in your home to transport broadband around the building. A basic homeplug starts at £30 and you'll need to connect your device via ethernet cable. Wireless models can cost up to £180.

Pricier mesh network devices, such as Google Wifi (£129 for one), can help you to achieve better wi-fi coverage. This type of router communicate wirelessly with each other to create a single, blanket-like wi-fi network. There's no need for wires or ethernet cables, but most homes will need at least two for the best results, so it can be pricey.

For more information, read our guide to wi-fi extenders and powerline adaptors.

10. Secure your wireless network and router

Without a password, people in the local area may be logging on to your wireless broadband network and sharing your connection if it isn't secure. This will decrease your own broadband speeds.

It's important to set a secure password, so that only people who know the password can access your connection.

You should also choose a secure password for your router. Many come with a default username and password, making them easy targets for hackers who can then get access to wireless devices such as wi-fi security cameras or wireless baby monitors. Your provider's website or instruction manual should explain how to change this.

11. Spring clean your computer

Every time you access a webpage through your browser, the browser stores or 'caches' it. Periodically clearing out your browser's cache will help it to function more efficiently.

Also update your online browser – such as Google Chrome or Safari – as outdated versions might mean slower download speeds. And check your antivirus software is up to date, as viruses and similar nasties can use your broadband connection, which can make your speeds appear to slow down.

Are you getting the best broadband service you can?

It is important to remember that if you do manage to improve your connection, you won't necessarily receive a better service. It is always a good idea to check the best speeds available and consider upgrading your connection or change service providers.

You can see what service providers have to offer here: https://www.ofcom.org.uk/phonestelecoms-and-internet/advice-for-consumers/costs-and-billing/price-comparison

You can check your current internet speed here: https://broadbandtest.which.co.uk/

Still getting slow speeds? Check your rights

If you've followed all these steps and are still suffering slow speeds, then you should contact your broadband provider to see if they can fix the problem.

Most of the major broadband providers - BT, EE, Plusnet, Sky, TalkTalk, Utility Warehouse, and Zen Internet - have committed to Ofcom's code of practice on speeds. This means that when you sign up they must give you a minimum guaranteed speed - if your actual speed drops below this, you'll have the right to leave your contract without penalty.

Several providers (BT, Hyperoptic, Sky, TalkTalk, Utility Warehouse and Zen Internet) have also committed to Ofcom's automatic compensation scheme. This means that if something goes wrong - for example, you have a long outage - you will get money back without having to chase it.

Consider switching broadband provider

If you're out of contract with your current provider, then it might be worth considering a change.

Use the Ofcom approved list of comparison sites here: https://www.ofcom.org.uk/phonestelecoms-and-internet/advice-for-consumers/costs-and-billing/price-comparison depending on the deal you're on, you may be able to upgrade to a faster connection and pay the same tariff or less.