FIBRE BROADBAND - MAKING THE MOST OF YOUR FASTER CONNECTION

We have pulled together the advice below from a variety of sources and presented it in this one document for your convenience - we hope you find it useful.

Once you have selected and purchased your new fibre product you will be connected either by;

• FTTC (Fibre to the Cabinet) which uses your own phone line to deliver the last step of the fibre broadband, or

• FTTP (Fibre to the Premises) which brings the fibre-optic connection all the way to your home or businesses

Your internet service provider (ISP) should tell you during the sign-up process what maximum speed you are likely to get - if they don't, make sure to get them to check. The ISP will quote speeds as 'megabits per second' often shortened to 'meg' and written as Mb. The more megabits per second the faster the broadband connection should be.

Some ISPs may also talk to you about the amount of megabytes you can download each month. Megabytes tend to be used to measure file sizes, it is written as MB (both upper case as opposed to Mb for megabit!) . The bigger the number, the bigger the file. Some really large files may be measured as gigabytes shown as GB.

When your fibre is connected the installation engineer will advise that the line speeds will likely take up to 2 weeks to stabilise. However there are also a number of pointers that can help ensure that you can get the most out of your new fibre connection.

Check your speed

1. With FTTC connections your connection speed can fluctuate dramatically during the first 10 days or so, as the equipment at either end 'tunes' itself to deliver the best sustainable speed.

2. If you are using a speed tester to see what speed you are getting, results can vary between different testers. With some service providers, you may find that your speed reduced at busy times of day – many service providers guarantee a speed of at least 16Mbps for at least 90% of the busiest time of day (4-7pm), provided that your connection can support a speed at least this level.

3. If you think your internet has slowed down, you should use a speed tester with a computer plugged directly into the router (to eliminate any bottlenecks caused by the internal wireless or wired network). This should show a speed similar to the prediction you were given when you ordered.

4. For many service providers, **speedtest.btwholesale.com** is a good way to test the internet speed for your connection all the way to the ISP itself and will help identify where in the network any problems may reside. If this speed test does not work then refer to your ISP for guidance (often found on their website).

5. Always follow the guidance when performing speed tests, such as making sure no other network traffic is sharing the connection and taking average readings at various times of day.

Check your hardware

1. The actual download speed you will achieve is dependent on a number of factors including anything that stands between you as the user and your internet connection. This could be your internal wiring, an old PC or laptop, a slow Wi-Fi network, an out of date router or a problem in the broadband connection. To find the cause of the problem will mean checking each of these to find out which link in the chain is causing the issue.

2. Most ADSL routers are not suitable for fibre broadband so if your new fibre package does not include a new one then you will need to upgrade your router and ensure it is configured for fibre broadband. (Note :Old routers left plugged into the network can cause problems with conflicting information).

3. Check your router settings and if necessary reconfigure these too.

4. Consider upgrading all network components to Gigabit speeds to really make sure that everyone who using your connection and all the different devices are seeing the maximum speed possible. Older network components in particular are more likely to be incompatible with fibre speeds.

5. Check for radio interference inside your home most likely culprits are boilers, water heaters and anything with a motor in them, interference can also be caused by other electrical devices such as TVs. The interference is most likely to affect you if your broadband router, or telephone cabling runs next to or by the device causing it. So avoid placing the broadband router behind your TV or amongst a nest of mains cables and where possible connect the router to the telephone line at the master socket.

Check your wireless network

1. Find out if it is your wireless network that is slowing down your connection by running speed tests whilst plugged directly into the router, and then comparing them with speed tests run over the wireless network.

2. Consider splitting the wireless router from the main router / firewall, so that it can be located in the optimum place. The main router can then be more easily changed for another one if troubleshooting.

3. It is preferable not to use your wireless devices, such as tablets or smart phones to test the speed of your wireless network as some can only operate at limited speeds sufficient for the applications they can run

4. Your wireless network should use an up to date Wi-Fi 'protocol' - currently '802.11n' is the most widely available and fastest choice, although an even faster '802.11ac' is now becoming available. Older routers which use protocols like '802.11a-g' are likely to run slower. You need this on both ends of the wireless for the link to run as fast as possible.

5. It is very rare to see the full headline speed of the wireless equipment (such as 54Mbps for 802.11g) in a wireless network. As you get further away from your wireless router, or as walls get in the way, the signal will weaken and speeds will drop. To overcome this, you may need to extend your wireless network. This can be done in a number of ways, such as using wireless repeaters or wiring additional wireless access points back to your hub or switch – both over a dedicated Ethernet cable or using the power cables.

6. Wireless networks will run on certain 'channels' within the band of frequencies available. There are a limited number of channels, and any congestion from neighbours or multiple wireless hubs could cause further interference and slowing down. Most Wi-Fi networks run at 2.4GHz but the popularity of wireless can make for congestion, so some equipment now operates at 5GHz which is a more expensive option. Dual band wireless routers using both 2.4GHz and 5GHz will offer the greatest flexibility.

More information and help

For more information and support visit the ISP websites, plus there are many independent information and comparison websites that offer insights, reviews, guidance and advice, just use your search engine to find them. Here are a few we found, but there are many more available;

Think Broadband
Broadband choices
Choose
Genie
Simplify digital

For OFCOM acredited price comparison sites see http://consumers.ofcom.org.uk/tv-radio/price-comparison/

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