

# General NBN Fibre router setup advice

This article will provide some general router (or modem router) setup advice which may help you set up a third-party router or modem router for NBN Fibre broadband.

**Note:** This guide isn't suitable for NBN Fibre-to-the-Node (FTTN) or Fibre-to-the-Building (FTTB) services.

## What you'll need

- An active NBN Fibre broadband service. We'll send you an SMS and/or email when your broadband service is activated.
- A WiFi router or a fibre-ready modem router.

**Important:** The router should feature at least **802.11n or 802.11ac WiFi**. Not all wifi signal modes are created equal, and devices manufactured before 2009 may only feature the older 802.11g or b signals which won't support the speed capability of your NBN service.

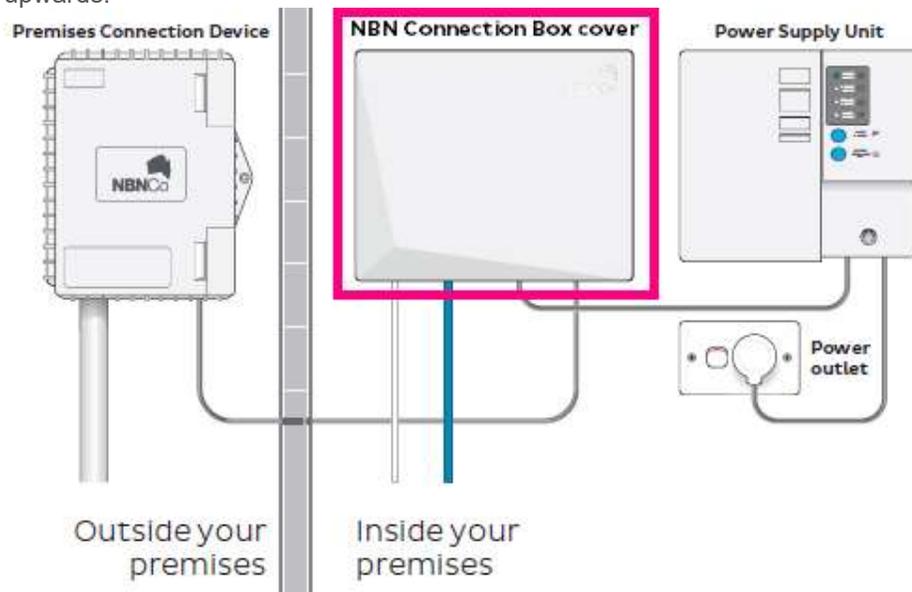
Similarly, older devices may simply be "modems" and not "modem routers", which means it doesn't have the ability to wirelessly broadcast your internet as a WiFi signal in your home. These days the vast majority of modems on the market are actually modem routers by default, and we just call them modems because that's the norm. If your modem doesn't have a WiFi feature, you'll need to purchase a WiFi router to use instead.

- The power supply cable that came with your router. If you buy a replacement for any reason, take care to note the Rated Input on the router's barcode sticker (e.g. 12V/2A) and buy a matching cable.
- An Ethernet cable (at least one is typically included with a router, usually a Cat 5e). There are different kinds of Ethernet cables. If you're purchasing one from a store, we recommend Cat 6 or Cat 5e. A Cat 5 cable is not recommended because it may not support the speed capability of your NBN service.
- **Optional to connect additional computer(s) to your router via Ethernet:** Additional Ethernet cable(s).
- **Optional if your home has Hub/Smart internal Ethernet wiring:** Another Ethernet cable. This will allow you to connect your NBN Connection Box to a port on the nearby patch panel, and then plug your router into the corresponding port on a patch panel in another room.

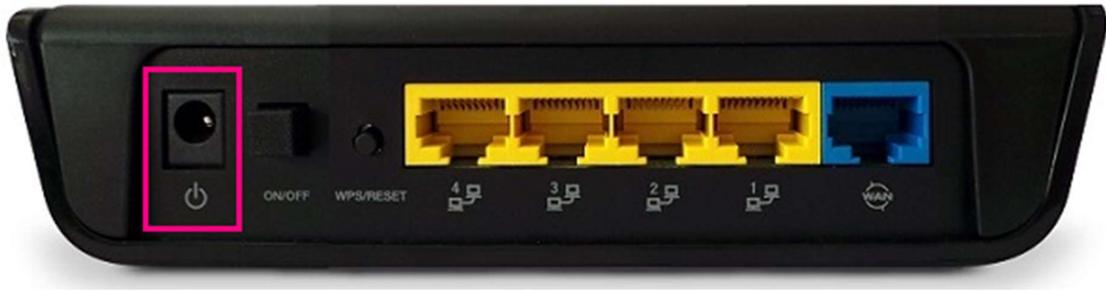
## Plugging in and connecting computers

1. Find the indoor NBN equipment in your home - this will be a Connection Box and a Power Supply unit. This is most commonly installed on the inside of an outer wall of the premises, sometimes in the garage.

**Note:** Since mid-2013, NBN Fibre Connection Boxes have been installed with a plastic cover by default. To lift this cover and see the ports and lights, gently prise the bottom of the cover away from the two clips holding it in place at the bottom of the unit and then lift the cover upwards.

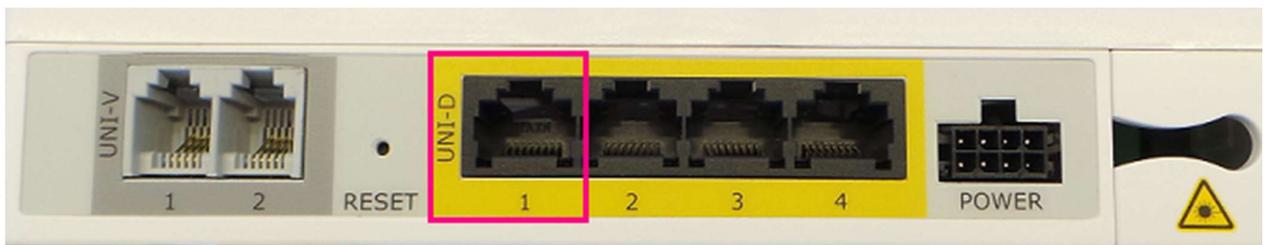


2. You'll also need an available electric outlet to give your router power. If you need to use a double-adapter, power board or extension cord this should be okay, but if your router ever seems to have power issues the first thing you should try is plugging the power supply cable directly into the electrical outlet on the wall.
3. Take your router's power supply cable and use it to connect your router's **power port** (example below) to an **electrical outlet**. You may turn the router on now or wait until you've finished plugging in the other cables.



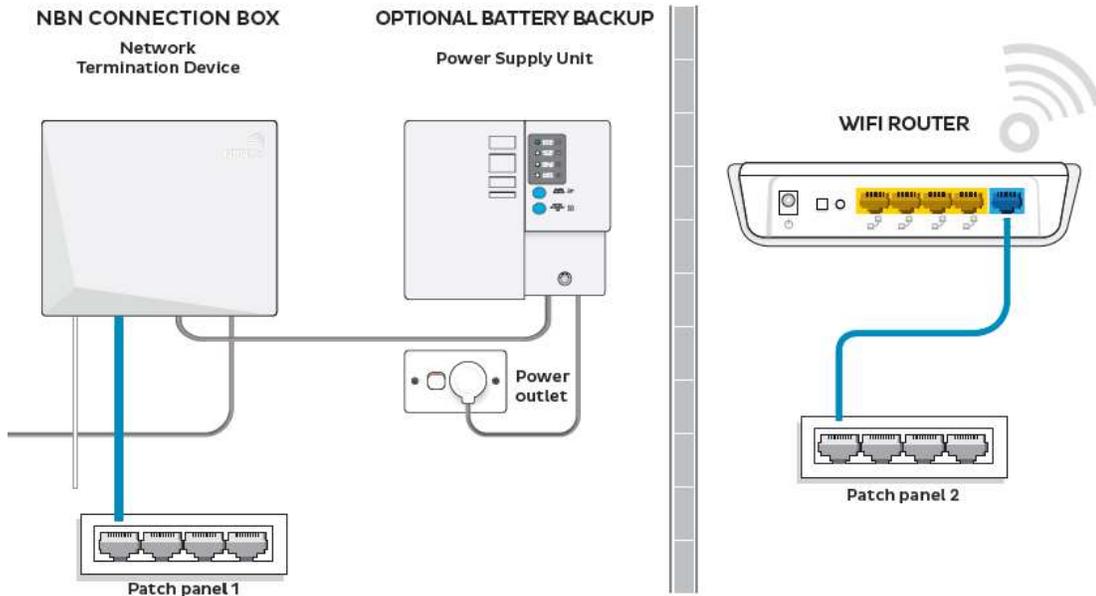
4. Take your Ethernet cable (this is typically blue, yellow or grey but other colours are possible) and plug one end into the active UNI-D port on your NBN Connection Box. In most cases, the active port will be **UNI-D 1** as shown below. If a different UNI-D port was activated when your NBN equipment was installed, please use that one instead.

If you don't know which port is the active one, please call us on 13 22 58 and we can check our records.



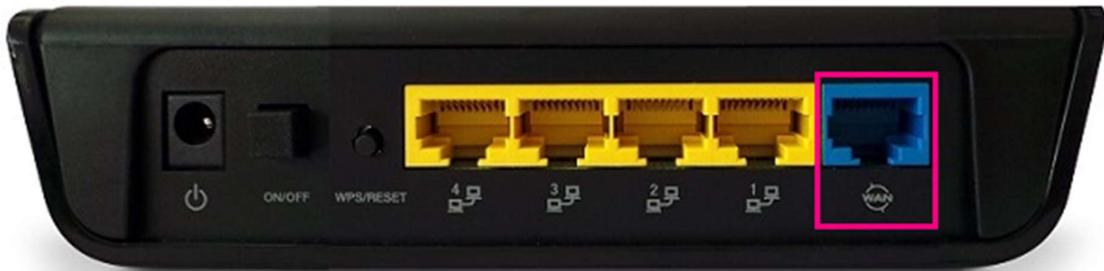
5. **Optional:** If your home has internal Ethernet wiring (sometimes called Smart or Hub wiring) then you may plug the other end of the Ethernet cable into a port of the nearby patch panel. You can then use another Ethernet cable to connect your router to the corresponding port on a patch panel in another room.

If you prefer not to do this or your home doesn't have Smart wiring, skip to the next step in these instructions.



6. Plug the other end of the ethernet cable into the router's **WAN port** - most routers have 4 Ethernet ports for LAN and then one Ethernet WAN port that is coloured/labelled differently (example below).

If you're uncertain which port to use, check the manufacturer's website for support information.



7. If you have a computer near your router that you'd like to connect via Ethernet, take another Ethernet cable (this is typically yellow, blue or grey but other colours are possible) and plug one end into any one of the routers Ethernet ports - most routers have 4 of them (example below).

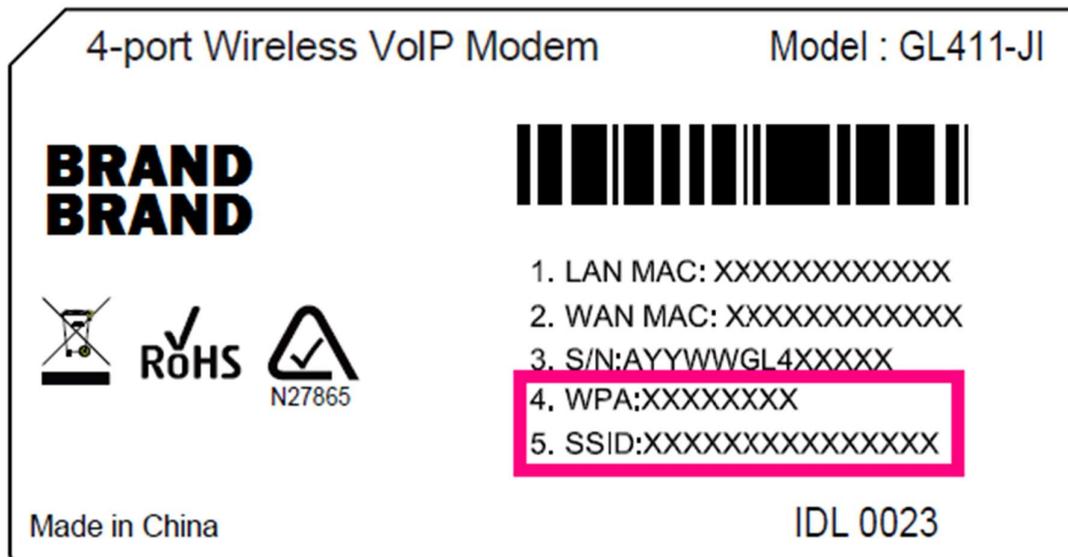
Ethernet ports are most commonly labelled "LAN" or a symbol showing objects linking together. If you're uncertain, check the manufacturer's website for support information.



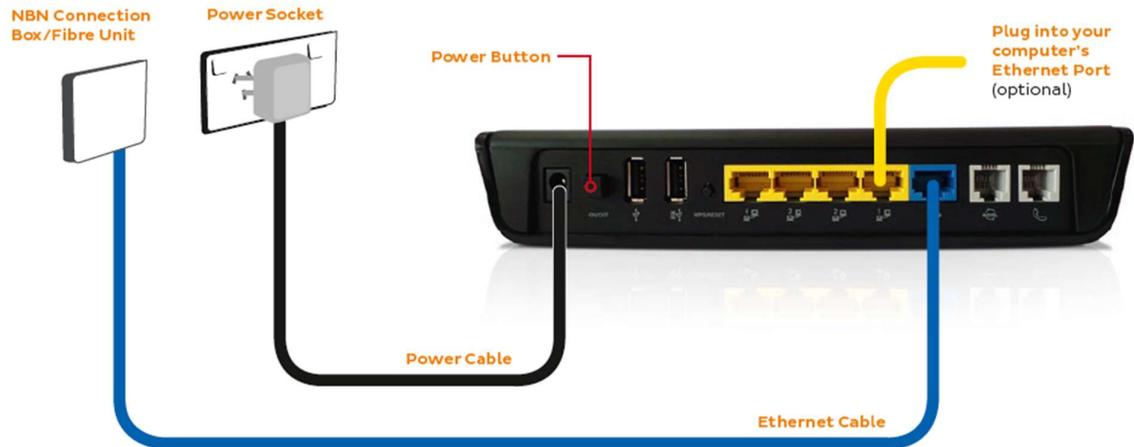
8. If you haven't already done so, turn your router on.
9. Other devices can be connected via WiFi. Modern routers are typically programmed to begin broadcasting WiFi as soon as they're turned on and have finished booting up.

If your router broadcasts WiFi by default, it will have a default WiFi network name (may be labelled "SSID") and default WiFi password (may be labelled "WPA", "WPA-PSK", etc.) which you can use to identify and connect to the WiFi. These details may be printed on a separate card included with the router, but they will also be printed on the barcode sticker on the back or underside of the router (example below).

If you're not sure how to connect your device using the default WiFi network name and password,



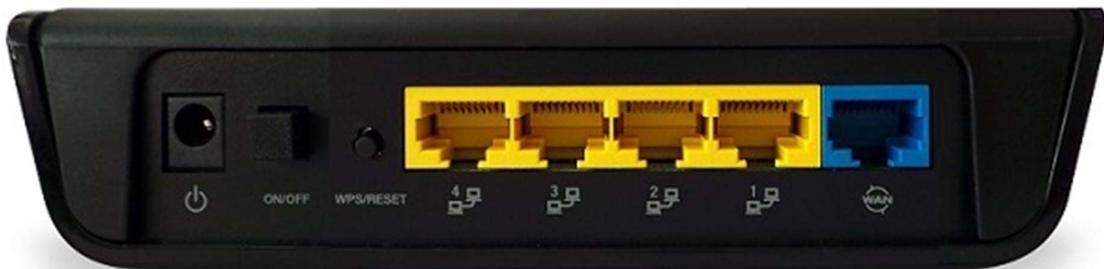
10. If your home doesn't have internal Ethernet wiring, your setup may look something like the example below.



## 11. IMPORTANT: Are you using a router or modem router?

If you're using a router, you may already be done. Your router will take the internet connection from your NBN Connection Box and broadcast it around your home as a WiFi signal.

Routers have less ports than modem routers, like the example below.



However, *modem* routers will usually also try to act as a "modem" by default. Your NBN Connection Box is already handling the "modem" side of things, so you'll need to access the modem router settings and change them as per the advice below so the modem router is purely acting as a "router".

Modem routers have more ports than a typical router-only device, similar to the example below.



## Changing the settings in a modem router

1. To access the modem router settings, you'll need a computer, laptop, tablet or smartphone that's connected to your router via Ethernet or WiFi.
2. Open your web browser and go to your modem router's default gateway. Some of the most common addresses are **http://192.168.1.1**, **http://192.168.0.1** and **http://192.168.1.254**.

If these addresses don't work for you, the easiest way to find the modem router's default gateway address is to check the manufacturer's website for support information.

3. You'll see a login page. If there's a username field, the default username will almost always be **admin** (it may even already be filled in). The default password is typically **admin** or **password**.

If you can't log in with these settings, please check the manufacturer's website for your modem router's default login settings. If the modem router is secondhand or you've used it previously, it may already have custom login details set. If you need to, you can factory reset the modem router to return it to the default settings.

4. **Important:** From here, it gets a little tricky to offer general advice for all modem routers. The layout of modem settings pages can vary greatly for each different modem. If you get stuck or it's not clear where you should change your broadband settings, you need to check the manufacturer's website for support information.
5. Ideally, your modem will have a **Setup Wizard** or **Quick Setup** that will run automatically the first time you log in to the settings, or there'll be a fairly obvious button to launch it. Some modems may include a Setup CD that will run this Setup Wizard for you and then send the

settings to your modem.

6. The Setup Wizard should run you through entering the required broadband settings, step by step.

The most important setting is the WAN Type/Connection Type/Encapsulation, which should be set to **IPoE** or **Dynamic IP**. This will stop the modem router from trying to act like the modem and make it "take orders" from the NBN Connection Box instead.

If there are any broadband settings in your modem's Setup Wizard that aren't covered in Broad Band Settings (e.g. MTU) then it should be fine to leave it as the default setting.

**Note:** Some special cases of fibre connections such as Internode services, South Brisbane Fibre and select locations do require a **PPPoE** configuration. If IPoE doesn't work for you, try selecting PPPoE instead. When using this connection type, you'll also need your broadband username and password which can be found on the email we sent you when your service activated. If you have forgotten these details, please call us on 13 22 58 for assistance.

7. Most Setup Wizards will run you through the WiFi settings as well as your broadband settings. This will give you the opportunity to change the default WiFi network name (SSID) and WiFi password (WPA/WPA2-PSK) to something you'd prefer.

You should write down your custom WiFi details for easy reference in the future, but you should **not** set your WiFi to have no password as this is a security risk.

**Note:** If you're accessing the modem settings over WiFi and you've changed the WiFi settings, your device will disconnect once the new settings have saved. You'll need to reconnect using the new WiFi details. If your device appears to remain connected to the WiFi but you can't get online, you may need to go into the device's WiFi settings and select "Forget this network" before reconnecting.

8. After completing the Setup Wizard and saving your settings, give the modem some time. Some modem routers reboot automatically after every new configuration, while others simply need a few minutes to apply the settings.
9. Take a look at the lights on your modem router. Most should now be green, blue, purple or another "positive" colour. Many modem routers have lights that flash to indicate connection activity, so you shouldn't be concerned if any lights are flashing unless the manufacturer's support information specifically advises that flashing lights indicate a problem.

If any status lights appear red, orange or another "warning" colour, consider trying our to restart all equipment, if this continues, contact [support@gointernet.net.au](mailto:support@gointernet.net.au)

10. Hop on one of your computers or WiFi devices and try to visit a website. If it works, your broadband is up and running!