In this guide we'll run through how to connect your router so you're up and surfing in no time.

The simple guide to setting up your
Netcomm NB604N Wireless Modem Router.

Australian
Phone & Internet

Well, hello there...

Thanks for choosing Australian Phone & Internet as your broadband provider. We're really excited to have you on board.

The great news is your ADSL (broadband) account is now live! All you need to do is install your router and connect your computer then you'll be ready to start surfing the web.

We've done all the complicated work setting up your router so it's just a simple matter of connecting the right cables and turning everything on. We'll run through that process step-by-step in this guide to make is as simple as possible.

If you're pretty tech-savvy and want to use some of the more advanced features of your router, further information can be found in the support section of the Netcomm website at **http://support.netcommwireless.com/**

If you can't find what you're looking for in this guide or online, just call **1300 137 768** – our friendly Aussie-based team are on hand to help.

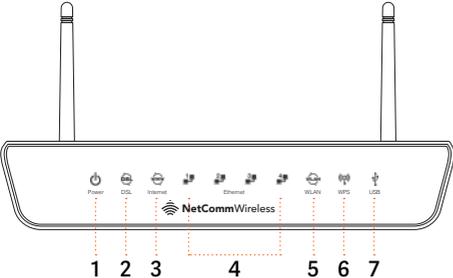Enjoy your surfing,
The Australian Phone & Internet Team.

What comes next

Getting to know your brand new router

The front panel

The back of the router is where you connect everything, turn it on/off and also reset it. Here we'll explain what each of the ports, sockets and buttons is, where they are and what you use them for.

1.	**Power**	**Off –** Router is not powered on **Red** Router is starting up **Blue** Router is operating normally
2.	**DSL**	**Off –** Router is not connected to an DSL service **Blue –** Router is connected to an DSL service **Flashing –** Router is connecting to an DSL service
3.	**Internet**	**Off –** Router is not connected to the internet **Red –** Router is unable to connect to the internet with the current configuration details **Blue –** Router is connected to the internet **Flashing –** Data is being transmitted or received via the internet connection
4.	**Ethernet ports 1-4**	**Off –** No device connected to the LAN port **Blue –** Device connected to the LAN port **Flashing –** Data is being transmitted or received on the LAN port
5.	**WLAN**	**Off –** WiFi function is disabled **Blue –** WiFi function is enabled **Flashing –** Data is being transmitted or received via the WiFi network
6.	**WPS**	**Off –** WPS function is disabled **Blue –** WPS function is enabled **Flashing –** WPS function is attempting to connect to a device
7.	**USB**	**Off –** No USB device is plugged in **Blue –** USB device plugged in **Flashing –** Data is being transmitted or received from the attached USB device

The back panel

The back of the router is where you connect everything, turn it on/off and also reset it. Here we'll explain what each of the ports, sockets and buttons is, where they are and what you use them for.
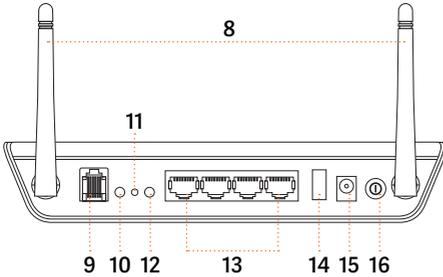
8.	Antenna	WiFi antenna
9.	DSL port	Attach a telephone line with an active xDSL service here
10.	WLAN	Press this button to enable or disable the WiFi function of the NB604N (this can also be done via the control panel)
11.	RESET	Hold this button down for 10 seconds or more to reset the NB604N to factory defaults
12.	WPS	Press this button to enable the WPS push-button connect function
13.	LAN ports 1-4	Attach your devices by cable to these Ethernet (RJ-46) ports
14.	USB	Attach an external USB storage device to share content with connected devices
15.	Power (12V)	Power connector, connects to a DC 12V 1.5A power adapter
16.	On/Off	Turn the NB604N on or off with this switch

Let's get started

We'll take you through a step-by-step process of installing your router and both wired and wireless connection.

Positioning your router

The position of your router can be important depending on how you intend to use it. You'll need a power point and phone socket nearby, and it should be close to your computer if you're connecting directly with a cable. If you plan to connect wirelessly it is worth considering where you place the router in your house to get the best signal. Here are some tips:

- Place the router somewhere central in your house for the best signal coverage in each room. In multi-storey homes, place the router on a floor that is as close to the centre of the house as possible. This may mean placing it on an upper floor.

- Try not to place your router near a cordless telephone that operates at the same radio frequency as your router (2.4GHz).

- Avoid placing your router near devices that may emit radio 'noise', such as microwave ovens.

- Also avoid dense objects that can inhibit wireless communication, including refrigerators, washers and/or dryers, metal cabinets, large aquariums, metallic-based/UV-tinted windows.

Installing your router

Once you've worked out where you want to put your router it's time to connect it. Before you do make sure any devices plugged into your phone line (handsets, fax machines, cable television, back to base alarm systems) have a central splitter or ADSL filter/splitter (you'll find this in the box with your router) fitted between them and the telephone socket.

Step 1	Connect the power adaptor cable to the **Power** socket on the back of the router and plug the adaptor into a power point.
Step 2	Plug the ADSL2+ filter/splitter provided with the router into your telephone wall socket.
Step 3	Next, take the telephone cable (RJ-11) provided and plug one end into the filter/splitter and the other end into the **DSL** port on the back of your router.
Step 4	Press the **On/Off** button to turn the router on and wait while the router powers up – this should take about 60 seconds.
Step 5	Check that both the **DSL** and **Internet** LEDs on the front have lit up. If they're solid then your router is connected to the internet. If not please refer to the Troubleshooting section.
Step 6	Now you can connect your computer with a cable or wirelessly.

Making a connection

Connecting with a cable

To connect to the internet/router with a cable follow these steps:

Step 1

Plug one end of the Ethernet cable (Cat 5e) provided into one of the yellow Ethernet ports marked **LAN 1 – LAN 4** on the back of the router and the other end to the Ethernet port on your computer.

Step 2

Wait for the connection to be made – this should take about 30 seconds.

Step 3

Check the corresponding **Ethernet** LED on the front of the router has lit up. If it's solid then you're connected. If not please refer to the Troubleshooting section.

Step 4

Open your browser (e.g. internet Explorer/Firefox/Safari) and start browsing the internet.

Connecting wirelessly

To connect to the internet/router wirelessly follow these steps:

Step 1

Enable WiFi on your device (computer/laptop/smartphone/tablet). The wireless network on your router is already enabled by default.

Step 2

Scan for wireless networks on your device and connect to the network name matching the one configured on your router.

Please note: The default wireless network name is **NetComm Wireless***

Step 3

Enter the wireless security key (password) configured on your router when prompted.

Please note: The default wireless security key is **a1b2c3d4e5***

Step 4

Wait for the connection to be made – this should take about 30 seconds.

Step 5

Open your browser (e.g. internet Explorer/Firefox/Safari) and start browsing the internet.

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* To protect your privacy and prevent people you don't know using your internet connection we recommend you change these default settings. The steps to change your wireless network name and wireless security key can be found on pages 11-14 in the section Setting up.

Setting up

How to log onto your router

Once you've installed your router and connected to the internet we recommend you adjust some of your settings. This can be done through the control panel. To access the control panel follow these steps:

Step 1

Open your web browser (e.g. Internet Explorer/Firefox/Safari), type http://192.168.1.1 into the address bar and press the **Enter/Return** key. You should see the control panel login (Fig. 1).

Step 2

Enter the login details and click **OK**.

Please note: The default **User Name** and **Password** are both **admin***

You should see the control panel home screen (Fig. 2).

Use the left menu to access all the settings on your router. On the following pages we'll explain how to change your network name, enable wireless security and change the password that allows administrator access to your router settings.

For information on the more advanced features and settings please download the full user manual from **http://support.netcommwireless.com/**

* To protect your privacy and prevent people you don't know using your internet connection we recommend you change the default settings. The steps to change your router access details can be found on pages 15-16 in the section Setting up.

Fig. 1: Control panel login

Fig. 2: Control panel home screen

Setting up (cont'd)

Setting up your wireless network

To turn your wireless network on or off and change your network name follow these steps:

Step 1

Select *Wireless > Basic* in the left menu. The wireless configuration screen will be displayed (Fig. 3)

Step 2

Make sure the **Enable Wireless** checkbox is ticked (it should be by default). This means your wireless network is turned on.

Step 3

Create a new name for your wireless network. This can be done in the **SSID** field (it's **NetComm Wireless** by default). It's recommended you change the name to something unique to make it easier to identify your network from others nearby but also for improved security. Your network name will be visible outside of your home or office, so the name should be recognisable but should not use any personal or service details.

Step 4

Once you've finished click **Apply/Save** to save your new wireless settings.

Fig. 3: Wireless configuration screen

Setting up (cont'd)

Securing your wireless network

To create a password and secure your wireless network follow these steps:

Step 1

Select *Wireless > Security* in the left menu. You'll see the wireless security screen (Fig. 4).
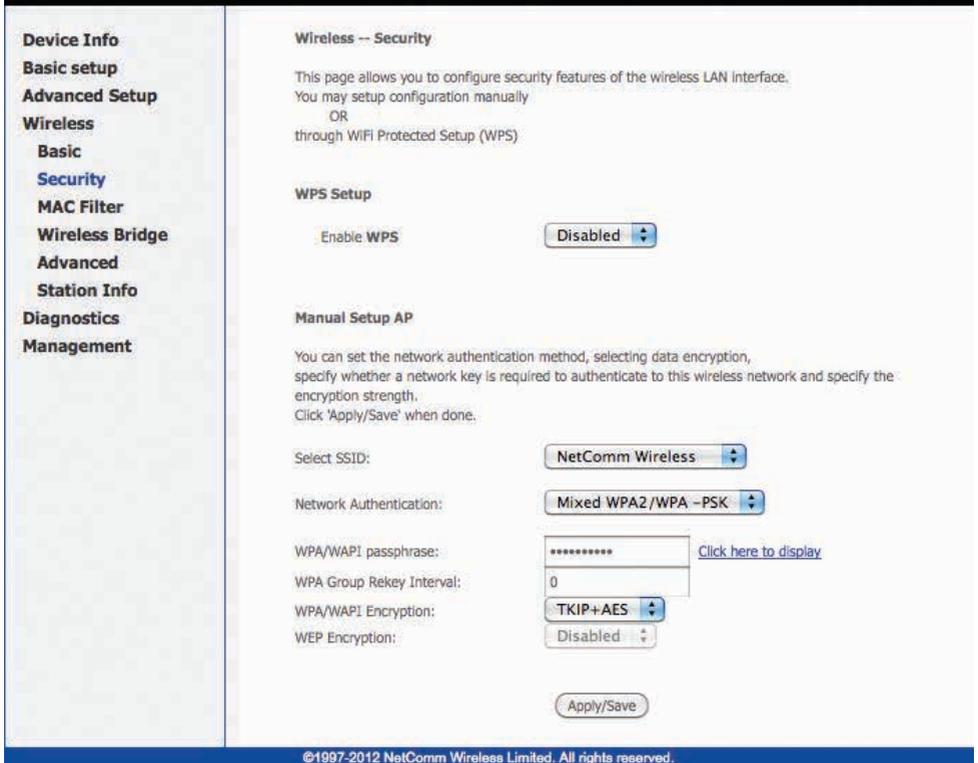

Step 2

Make sure your network name is selected in the **Select SSID** drop down menu.

Step 3

Use the **Network Authentication** drop down menu to select an encryption method. We recommend mixed WPA2/WPA2-PSK for the best security. By default it should already be set to this.

Step 4

Create a password that will be used to access your wireless network and enter it in the field next to **WPA/WAPI passphrase**. This is the password for your wireless network and prevents people you don't know from accessing it. When connecting devices to your wireless network you'll be asked for the password. Anyone who tries to connect without it won't be able to.

Please note: Your password for your wireless network must be eight or more characters long (the longer the better) and can include upper and lower-case characters, numbers and symbols. We recommend you create a complex password. The more complex, the more secure it will be.

Step 5

Once you've finished click **Apply/Save** to save the wireless security settings.

Fig. 4: Wireless security screen

Make a note of your password somewhere safe. If you forget it you can always view your password by connecting to your router with a cable, logging onto the control panel, going to wireless security and clicking the blue link next to the **WPA/WAPI passphrase** field which says **Click here to display**.

Setting up (cont'd)

Changing your router access details

When you configure your router through a browser, the system asks you to enter your username and password to validate your access permission. By default, these are both set to **admin**. We recommend you change these to prevent people you don't know accessing your router and changing the settings. To change both the username and password follow these steps:

Step 1   Select *Management > Access Control* in the left menu. You'll see the *Passwords* screen (Fig. 5).

Step 2   Depending on what you want to change, enter your existing username and/or password and a new username and/or password.

Step 3   Once you've finished click **Apply/Save** to save your new username and password.

Make a note of your new username and password somewhere safe. If you forget them you'll need to reset your router. For instructions on how to do this refer to the Troubleshooting section.

Access Control -- Passwords

Access to your DSL router is controlled through three user accounts: admin, support and user .

The user name "admin" has unrestricted access to change and view configuration of your DSL Router.

The user name "support" is used to allow an ISP technician to access your DSL Router for maintenance and to run diagnostics.

The user name "user" can access the DSL Router, view configuration settings and statistics, change Basic Setup, modify Wireless Basic and Wireless Security, as well as update the router's software.

Use the fields below to enter up to 16 characters and click 'Apply/Save' to change or create passwords. Note: Password cannot contain a space.

Username:
New Username:
Old Password:
New Password:
Confirm Password:

Apply/Save

Fig. 5: Passwords screen

Setting up (cont'd)

Re-entering your internet connection details

Your router comes preconfigured with all the settings required for it to connect to the internet. You shouldn't need to change these settings unless instructed to do so during troubleshooting.

Step 1	Select *Basic Setup* in the left menu. You'll see the *Quick Setup* screen (Fig. 6).

Step 2	Your **PPP username** and **PPP password** will already be entered in the fields. To re-enter your details simply select and delete what's there and re-type in your username and password.
	Please note: This is the username and password we sent you when we activated your account.

Step 3	Once you've finished click **Apply/Save** to save your new username and password. Your router will then automatically try to connect using the details you entered.

Fig. 6: Quick setup screen

Troubleshooting

Always begin troubleshooting by rebooting your computer and power-cycling the router. This is particularly important if your computer has only recently begun to exhibit problems.

To power-cycle your router do the following:

- Turn the router off and unplug it and wait 30 seconds
- Plug the router back in and turn it on, wait another 30 seconds
- Finally restart your computer.

Power-cycling your router re-synchronizes the ADSL signal and the network connection to your computer.

Problem	Solution
My router won't turn on/ the **Power** LED remains unlit	• Your router may not be connected properly. Check that the power supply is plugged in securely, both at the wall socket and at the back of the router. • Check the router's **On/Off** switch and power point are both switched on. • The power point you're using could be faulty. Try a different one, if possible. If, after trying these things, your router is still not on/the **Power** LED is still not solid blue, then your router may be faulty. Call us on **1300 137 768** or email **enquiries@ausphonenet.com.au**

Problem	Solution
My router isn't connecting to the internet and the **DSL** LED continues to flash	• Your router may not be connected properly. Check cables are plugged in securely – you should feel/hear a slight 'click' when they are. • Other devices may be interfering with the router's signal. Make sure all other devices (phones, faxes, cable television, alarm systems) are plugged into the phone line via a filter/splitter. Try plugging the cable from your router directly into the phone socket in the wall, bypassing the filter/splitter. Lastly, perform an isolation test by connecting your router directly into the phone socket and disconnecting every device that is connected to a phone socket. • The phone socket or line may be faulty. Try a different phone socket, if possible. • The cable connecting the router to the phone line may be faulty. Try a different cable, if possible. • Audible noise on the phone line may be interfering with your signal. Disconnect the router and listen for noise on your phone. If you hear snaps and crackles when making a phone call there may be a landline/fixed service fault. If, after trying each of these things, the **DSL** LED is still not solid blue your router may not be connecting to the exchange due to a service outage. Please contact technical support on **1300 137 768** or email **enquiries@ausphonenet.com.au**
My router isn't connecting to the internet. The **DSL** LED is solid blue but the **Internet** LED is off/solid red	• There may be a problem with the connection. Reboot the router to reset the connection. • Your service connection username/password may be incorrect. You can correct this by logging into your router (p.9-10), going to *Basic > Quick Setup* and re-entering your internet connection details (p.17-18).

Problem	Solution
My computer is connected to one of the **LAN** ports but I can't access the internet	• Your router and computer may not be connected properly. Check the **Ethernet** LED that corresponds with the port you're plugged into is lit. Check cables are plugged in securely – when they are you should feel/hear a slight 'click'. • A network device between your computer and your router, such as a hub, may be causing the problem. Bypass these and connect directly to the router to make sure they are not the cause. • The Ethernet cable connecting your computer to the router may be faulty. Try a different cable, if possible.
I can't see my wireless network	• Your wireless network might not be enabled. You can tell whether it is by checking the **WLAN** LED, which should be lit blue. If it isn't then log into your router (p.9-10) and go to *Wireless > Basic* and enable your wireless network (p.11-12). • If the **WLAN** LED is lit but you still can't see your wireless network it may be hidden. Go to *Wireless > Basic* (p.11-12) and uncheck the **Hide Access Point** checkbox. • You may be out of range of your wireless network so will need to move closer to your router.
I can't connect to my wireless network	• Your wireless network might not be enabled. You can tell whether it is by checking the **WLAN** LED, which should be lit blue. If it isn't then log into your router (p.9-10) and go to *Wireless > Basic* and enable your wireless network (p.11-12). • You may have entered your wireless network name and password incorrectly on your computer. Try entering them again. By default the wireless network name is **NetComm Wireless** and the password is **a1b2c3d4e5** unless you've changed them.
I've forgotten my wireless network password	• If you forget your password you can retrieve it by logging into your router (p.9-10) and going to *Wireless > Security* and clicking on the blue link next to the **WPA/WAPI passphrase** (p.13-14) field which says **Click here to display**.

Problem	Solution
I can't access the control panel at http://192.168.1.1	• Your computer may not be connected to the router or it may not be on. Check the router is switched on (**Power** LED is blue) and all cables are plugged in securely; or, if you are connecting wirelessly, that your wireless network is enabled (**WLAN** LED is blue) and your computer is connected.
I've forgotten the password that allows administrator access to my router settings	• The default username/password are both **admin**, unless you've changed them. • If you've changed them you'll need to reset the router to factory default settings by holding down the **Reset** button for at least 10 seconds (you'll need a paper clip or something similar). You should then be able to log on using the default username/password.

If the steps in this troubleshooting guide don't resolve the problem, or for further assistance with any of the features mentioned throughout this guide, please call our friendly technical support team on **1300 137 768**.

For further support with the advanced features of your router, such as hiding your access point, setting up guest networks and port forwarding, download the full user manual from **http://support.netcommwireless.com/** or contact their support team in your state:

NSW/ACT: (02) 9424-2059
VIC/TAS: (03) 9012-3399
SA/NT: (08) 8121-9001
QLD: (07) 3102-8870
WA: (08) 9467-8980

Glossary

Access Point
An access point is a device on a network, such as a router or hub, which allows data to be transferred from one location to another (i.e. computer to computer or computer to internet).

ADSL
Asymmetric Digital Subscriber Line or (ADSL) is simply a DSL line. It has different upload and download speeds.

DSL
Digital Subscriber Line (or DSL) is the technology that allows large amounts of data to be sent over existing ordinary copper telephone lines.

Ethernet
Ethernet is the standard way of connecting computers and devices over a LAN in the home or workplace. Recent computers will be factory fitted with an Ethernet card and socket.

Filter/Splitter
When you have ADSL broadband your phone and internet connection use the same physical line. You use a filter/splitter to connect your phone to the shared phone line so you can't hear the high-pitched noise of data being sent and received.

ISP
An Internet Service Provider (or ISP) is the company, such as Australian Phone & Internet, which provides you with access to the internet.

LAN
Local Area Network (or LAN) is a group of devices linked together in a workplace or home, either by cable or wirelessly, to form a closed network through which they can communicate with each other and the internet.

Modem
A modem (modulator-demodulator) is a device that allows you to connect to the internet by encoding and decoding high-speed digital signals sent and received over analog copper phone lines.

Router
A router is a device, usually combined with modem, which sits between your computer (laptop, iPad, smartphone, etc) or network and the internet and makes sure that all data goes where it should. Basically it directs traffic. Routers are great for operating a network that has more than one device requiring access to the internet.

SID
Service Set Identifier (or SSID) is the technical jargon for the name of a your wireless (WiFi) network. All wireless devices on a WiFi network must use the same SSID in to connect to the network and communicate with each other and the internet.

WLAN
A WLAN or Wireless Local Area Network is the same as a LAN but without the need for wires.

WPA/WAPI
WiFi Protected Access/ WLAN Authentication and Privacy Infrastructure (or WPA/WAPI) is a method of encryption that was created to improve on the security featues of WEP.

WEP
Wired Equivalent Privacy (or WEP) is a method of encryption used to secure wireless networks and protects wireless users data from being intercepted people they don't know. WEP is less secure than WPA/WAPI.

WiFi
WiFi is the popular term for WLAN and is trademark of the Wi-Fi Alliance. It is used as branding for devices that can access wireless networks (such as wireless internet).

Well, that's the hard part over. Now you're ready to enjoy your unlimited surfing.

If you think you might need a extra help, our technical team are on hand to help. Simply call **1300 137 768** or drop them a line at **enquiries@ausphonenet.com.au**