



National
Broadband
Network

Preparing for the NBN

Fixed Wireless Connections

www.nbnco.com.au
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NBNCo
Bringing broadband to life

Congratulations on choosing to join the National Broadband Network

Your new fixed wireless connection will give you access to world-class high speed broadband.

This booklet explains more about your fixed wireless equipment and what happens next.

3 steps to connecting to the NBN

Step 1: Order your service

All you need to do to get started is call a participating internet service provider and make an appointment for the installation of your equipment, which will be both on the outside and inside of your premises. Don't forget to get permission from the landlord if you are not the property owner.

Step 2: Installation

On the day we will conduct a radio signal survey to ensure that your premises is able to receive a good quality fixed wireless service.

We then mount an Outdoor Antenna on the roof of your premises and an internal Network Termination Device to an interior wall, with a cable running between them.

Step 3: Connecting to the internet

Once your service has been installed and tested you may connect up any equipment that you use to access the internet. For instructions on the best way to connect to the internet once your NBN Co fixed wireless service has been installed, contact your internet service provider. Please note that your existing DSL and cable modems may not be compatible with the NBN, so check your equipment with your internet service provider.

Appointment time

Why not make a note of your appointment date and time here:

Once you have read through this brochure

Complete the checklist on page 6 to make sure you are prepared for your new NBN service. If you still have questions after reading this brochure you can visit the NBN Co website, or call your internet service provider.

Who will I deal with during my installation?



Internet service provider: Your internet service provider will help you select your plan and arrange a time and date for your installation. They will liaise with NBN Co's installers and should be your main point of contact.



NBN Co: NBN Co are responsible for rolling out the National Broadband Network across Australia. You shouldn't need to contact them directly, but if you have any questions that your internet service provider is unable to assist with, you can call NBN Co on 1800 881 816.



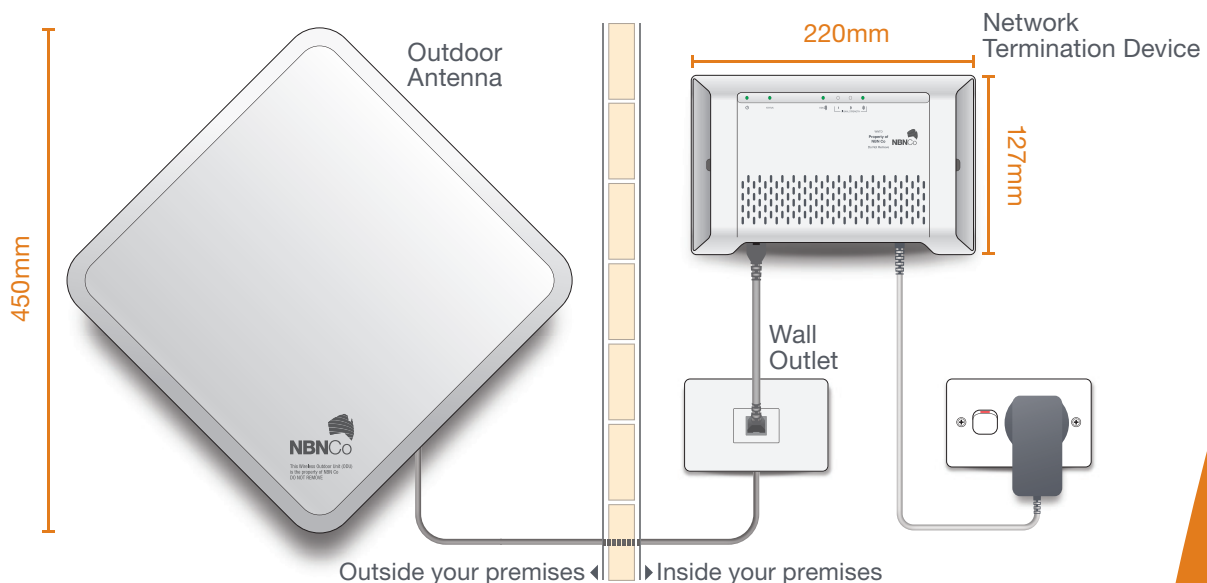
NBN Co installer: This is the official representative of NBN Co who will complete the installation of equipment on your property and make sure it is working correctly. They will be in contact before your installation to introduce themselves and confirm your appointment time.

Preparing for your installation

Before the day

You will receive a phone call from an NBN Co representative both one week in advance and on the day prior to confirm your installation appointment time.

In that time, it would be a good idea to think about where you would prefer the internal equipment to be installed. This is what your NBN equipment will look like and it's approximate dimensions:



Positioning considerations

The best place for your indoor Network Termination Device is one that is;

- ✓ Near your existing phone or network cabling or devices that you will use the most
- ✓ Within 1.5 metres of a dedicated 240V power point (a mandatory requirement)
- ✓ In a cool, dry, ventilated area
- ✓ Away from busy areas where it may be knocked and damaged
- ✓ Where it will be easy for you to check the indicator lights if there is a problem

PLEASE NOTE

Your data cables cannot extend outside or between buildings.

On the day

You will receive a third phone call approximately one hour prior to the installer arriving at your premises. When the installer arrives at your premises at the allocated time, ensure you check their ID before giving them access to your premises.

The installer will work with you on the best location for the NBN equipment. Currently at least one installation option will be available at no charge for your premises. However, if you would like your installation done in a particular way, please discuss this with your installer as in some circumstances (e.g. for particularly complex or difficult installations), there may be charges associated with this. If your Outdoor Antenna installation is not going to be on your roof or eaves, it may require a custom installation and an appointment for a follow up visit by the NBN Co installer.

External installation

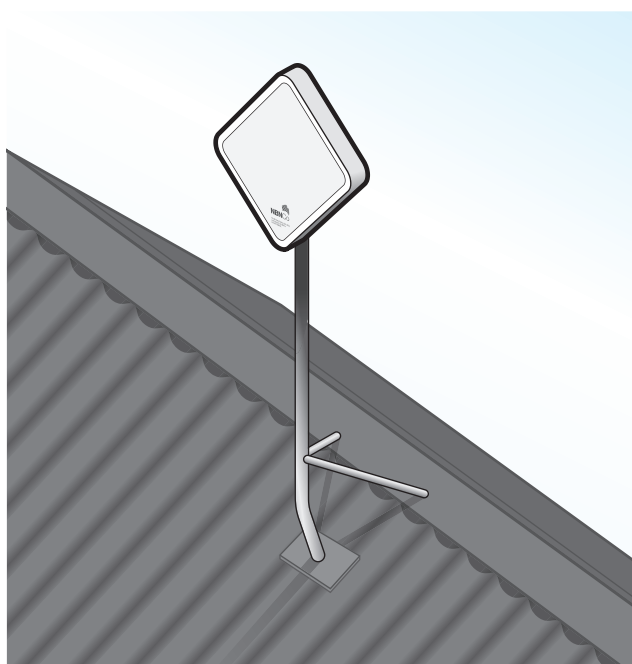
The Outdoor Antenna will be installed on your premises in a location that has direct line-of-sight to an NBN Co fixed wireless base station.

Generally, NBN Co will look at installing the antenna either with a mounting from under the eaves of your roof or on the roof itself. If neither of these locations provide direct line-of-sight to the base station, NBN Co's installer may look for another suitable location on your premises.

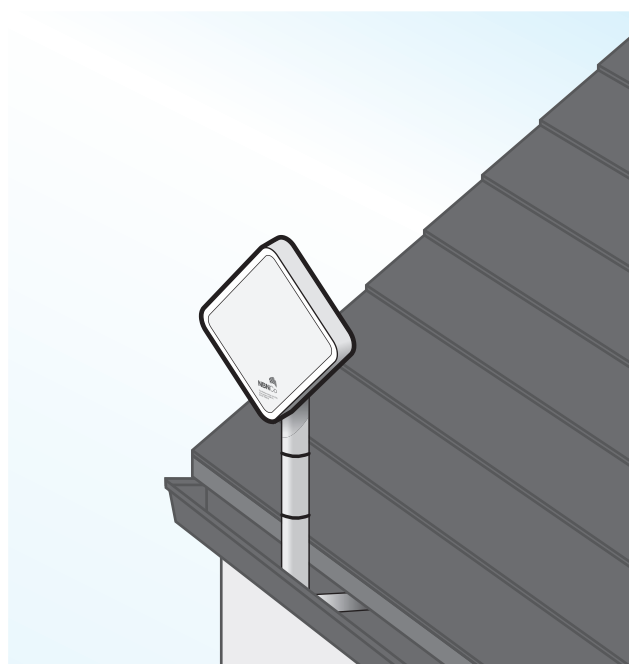
The installer will then conduct a radio signal survey to ensure that your premises is able to receive a good quality fixed wireless service. If that survey does not confirm that you can receive a service of the right strength, we will not be able to proceed with the installation and you will be directed to contact your internet service provider to investigate other connection opportunities.

The installer will have ladders and other equipment to enable both the radio survey and the installation to be completed.

The Outdoor Antenna will be attached to your premises in one of these ways:



Roof mount



Gutter mount

Internal installation

The indoor Network Termination Device is wall-mounted and has four Ethernet ports that deliver your internet data.

The installation will require a cable to be run between the Outdoor Antenna and the internal Network Termination Device. This will generally require the drilling of a small hole in your external wall to enable the cable to pass through.

It might be necessary to move furniture around inside your house a little to get to the location you want the internal equipment installed. We'll need to drill a hole through your wall, as well as some other holes to wall-mount the equipment, so be prepared for a small amount of drilling noise and dust - but we'll clean up afterwards.

Installations normally take 2 to 4 hours. If you would like your installation done in a particular way please discuss this with your installer as this may take longer.

Connecting your equipment

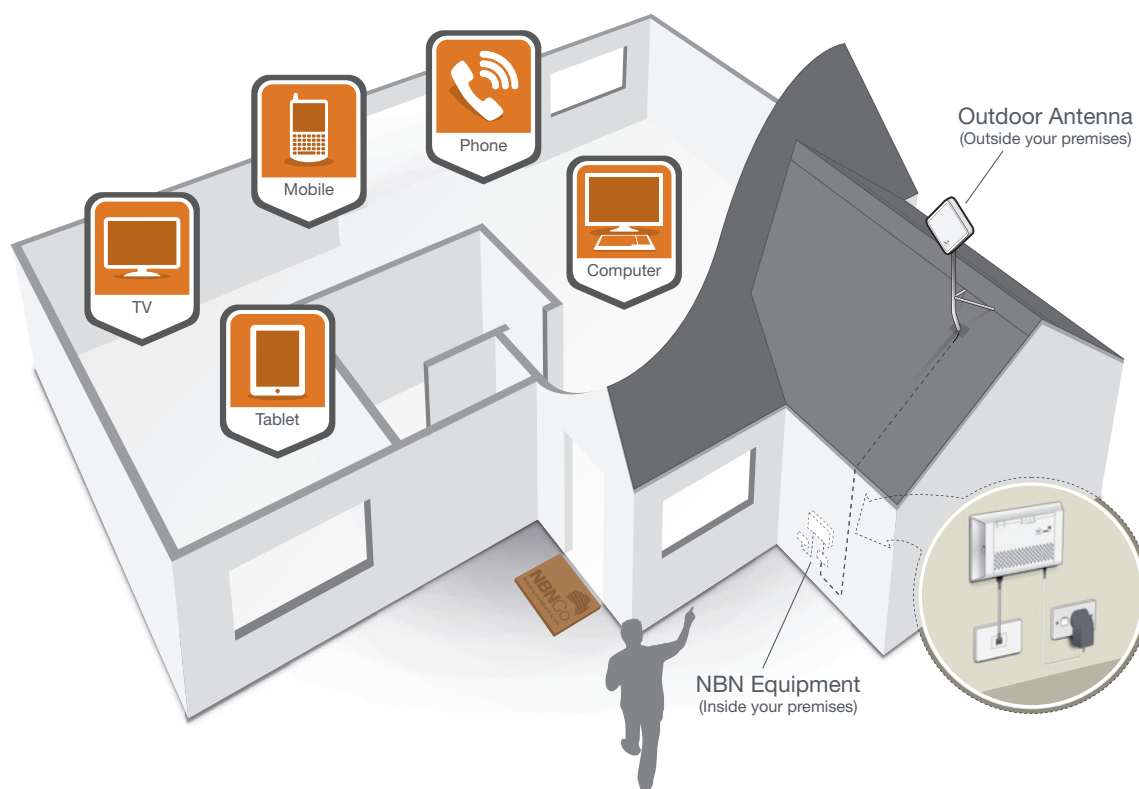
The next step will involve connecting any equipment that you use to access the internet. Your fixed wireless Network Termination Device has four 'ports' on the bottom where Ethernet cables can be connected to provide the broadband connection to your computer or other equipment.

Each Network Termination Device can provide services from up to four internet service providers, each using one of the four separate ports. Each internet service provider can also provide several services through the same port. Please don't plug devices into ports except for the one your internet service provider advises, as the other ports will be inactive, so your devices will not be able to use them.

For instructions on the best way to connect to the internet once your NBN Co fixed wireless service has been installed, and options for in-premises networking (not included in the standard installation) such as connecting your modem, Wi-Fi router and computer, talk to your internet service provider.

Installation approval

Your installer will take before and after photographs of the installation, and ask you to sign a form indicating your approval so you can be assured it will be done to your satisfaction before they leave.



Your questions answered

Do I need to be there for the installation?

You, or an authorised representative (someone you trust who is over 18), needs to be there for the whole appointment, to let the installer in, and agree where the equipment should be located.

How much will the installation cost?

Currently at least one installation option will be free for you. If you would like your installation done in a particular way please discuss this with your installer as there may be charges associated with this.

Can the weather affect my installation?

Yes adverse weather conditions may make installation unsafe for the NBN Co installer. If weather prevents us from being able to connect your equipment safely, we'll arrange to reschedule your installation for another day.

If I get poor mobile reception won't I get a poor fixed wireless connection?

No, we are building a completely separate fixed wireless network. Poor quality mobile reception is not an indication of what you will experience on NBN Co's fixed wireless service.

Do I need to get a separate supplier for the internal wiring?

The NBN installer will not undertake internal wiring tasks, and permanent cabling through wall, floor or ceiling cavities must be done by a registered cable installer. Your internet service provider may be able to recommend a registered cable installer in your area.

Will there be any interruption to my existing phone and internet service?

No. Your existing copper line or equivalent service will not be altered or changed by the NBN Co fixed wireless installation at your premises. However the fixed wireless service does enable new telephone connections to be made via the data port and your internet service provider may offer that telephone service as well as broadband, so if you find you no longer require your existing copper service please contact your internet service provider to discuss cancellation of your contract.

I have a monitored home or premises security system. Will it work on the NBN?

If you would like to use an existing security system, you should check with your security system provider to ensure that your particular equipment and service is NBN-compatible, and check with your internet service provider that they can support this function with your connection. Existing monitored systems will not work over the fixed wireless without a change of equipment in the premises.

Checklist for connection

I have arranged for an authorised representative who is over 18 to be there for the whole appointment.



I have my landlords consent for the installation (if required).



I understand that a normal installation appointment might take up to four hours.



I have considered where I would like my NBN Co equipment to be positioned in my premises.



I have checked with the relevant manufacturers that any alarm systems and medical alert systems I rely on will work on the new NBN connection.



What is the difference between fixed wireless and mobile wireless?

NBN's fixed wireless network, which uses advanced technology commonly referred to as LTE or 4G, is engineered to deliver services to a fixed number of premises within each coverage area.

This means that the bandwidth per household is designed to be more consistent than mobile wireless, even in peak times of use.

Unlike a mobile wireless service where speeds can be affected by the number of people moving into and out of the area, the speed available in a fixed wireless network is designed to remain relatively steady.



Fixed Wireless

Single type of device with a fixed number of connections operating at a fixed cell boundary



Mobile Wireless

Variable numbers and types of devices, operating at variable cell boundaries

Once on the NBN, will I be able to use the phone if my power fails?

In the fixed wireless area, NBN Co will not alter or affect your copper line phone connection.

IMPORTANT: The internet and phone services that use the internet will not work during power outages.

Can I run everything on a wireless network?

Yes, it is possible to run most services over a wireless network but should you find wireless limiting for any reason there are other options. You should talk to the installer, your internet service provider or a registered cable installer about the best way to connect other services inside your premises.

Do I need to install any cables and outlets?

It is possible to run most services over a Wi-Fi network, but you may prefer to have cabled connections for data and/or phone outlets. You can arrange for a cable installer to install points now or you can wait until you and the installer have agreed on the location of your Network Termination Device. You can arrange to have as many internal home network points as you like.

The cable installer you choose to undertake this work must be registered with an Australian Communications and Media Authority (ACMA) accredited industry registrar.

What if the installer damages my property?

The installer will take appropriate care on your premises during the installation however in the unlikely event that we cause any damage you can contact us on 1800 881 816.

What do I do if I can't attend the appointment?

If you can't be there on the day of your appointment, you can either reschedule it with your internet service provider, or ask someone you trust who is over 18 to give access to all areas of your premises and make decisions about the installation for the installer.

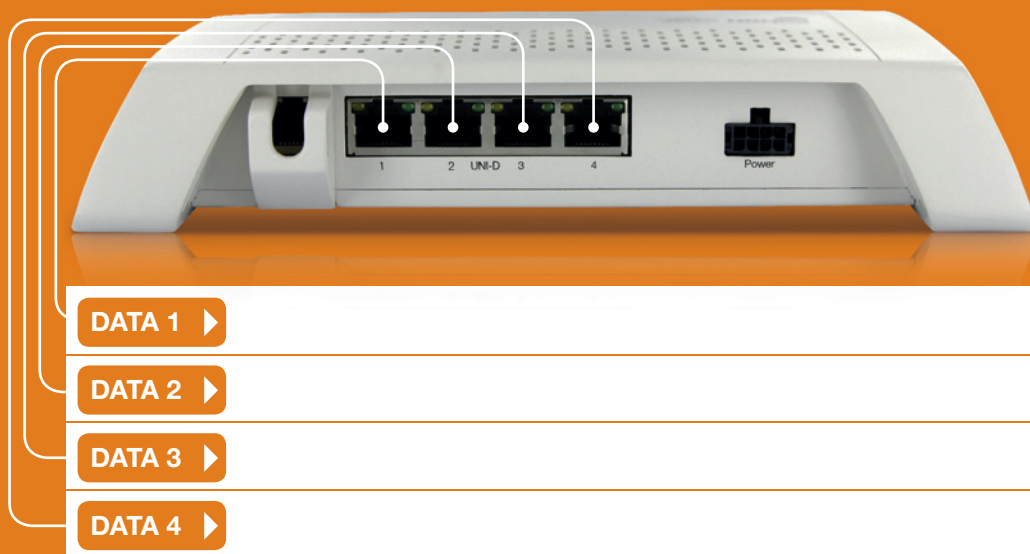
Remember that if you authorise someone else to be present on your behalf for your appointment they will need to make decisions including where the Outdoor Antenna and the internal Network Termination Device should be installed. If you decide later to change the location of the equipment, additional charges may apply.

Are the radiation levels emitted from the Outdoor Antenna safe?

The fixed wireless Outdoor Antenna uses radio waves and operates within levels that comply with Australian standards. When working in the vicinity of the Outdoor Antenna the radio waves can be disabled by turning off the internal Network Termination Device.

CONNECTED SERVICES

You may like to keep a record of which services have been activated through which ports in your Network Termination Device in the diagram below.



CONTACT NUMBERS

Your internet service provider(s) can help you if you have any other questions about your new NBN service. You may like to write down the names and numbers of your internet service provider(s) below for future reference.

Highway Internet Services	02 6372 3645
	lynn@hwy.com.au

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DISCLAIMER

This document provides general information about the technical requirements for connecting to the NBN and is correct as at April 2012. Technical connection requirements may change due to factors such as legislative and regulatory requirements as well as advances in technologies. For any queries about your particular circumstances or requirements, please consult your internet service provider or other supplier.