User Guide Fixed Wireless Connections

Includes information about your NBN fixed wireless equipment

Please refer to this guide before attempting to perform maintenance on your equipment.

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YOUR NBN FIXED WIRELESS USER GUIDE

Congratulations on connecting to the National Broadband Network (NBN) through your chosen service provider. Services delivered over the NBN have the potential to transform many aspects of our lives including healthcare, education, business and government services. Your new fixed wireless connection gives you access to this vital communications infrastructure.

This guide provides information on how to help ensure your NBN connection equipment stays in good working order. It also outlines what to do should your system not work properly.

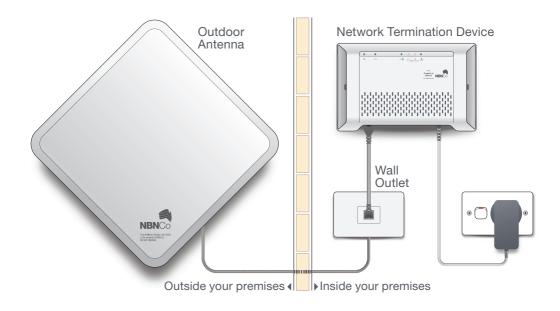
www.**nbnco**.com.au

YOUR NEW NBN EQUIPMENT

The equipment installed is comprised of three components:

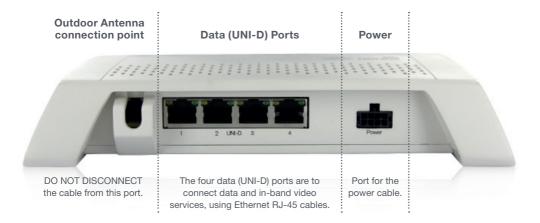
The Outdoor Antenna and cable that connects the Outdoor Antenna into your property, the Wall Outlet and the Network Termination Device – which is the hand off point between NBN Co's network and your internal wiring and connected equipment.

Once your NBN equipment has been installed and checked by the installer, you can connect your equipment to your Network Termination Device following the guide on the next page and begin enjoying your new NBN service straight away.



CONNECTING THE NETWORK TERMINATION DEVICE TO YOUR OWN EQUIPMENT

The back of the Network Termination Device has a row of ports like this;



Your broadband services will be delivered through the data (UNI-D) ports on the Network Termination Device. Your service provider(s) should advise you which data (UNI-D) ports have been designated for your services, and how to connect any necessary equipment to the correct port for each service.

All the cables required for the Network Termination Device to operate will be supplied and connected by your installer. Any extra cables required to connect your own equipment to the Network Termination Device will need to be supplied by you or your service provider.

The cable that connects the Network Termination Device to the Outdoor Antenna is supplied by NBN and will be fitted to the Network Termination Device by the installer. The cable connection is protected by a tamper-evident cover. Do not attempt to remove this connection or connect to it.

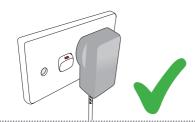
If you have followed the instructions from your service provider and your internet or other broadband connections are NOT working, or there are any red or flashing lights on the Network Termination Device, go straight to the TROUBLESHOOTING guide on page 8.

MAINTAINING YOUR EQUIPMENT

The NBN equipment in your premises should require very little maintenance if properly cared for.

Here are some important do's and don'ts to ensure the Network Termination Device and Outdoor Antenna stay in good working order.

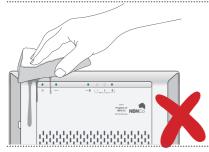
INSIDE YOUR PROPERTY



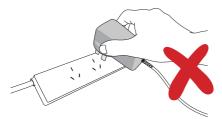
Keep the Network Termination Device plugged directly in to the mains power at all times and turned on.



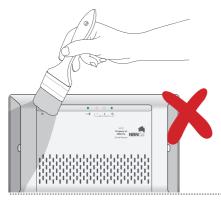
Regularly check the LED light indicators on the Network Termination Device. If they are not showing a green light, refer to the guide on page 9.



Do not use water to clean the equipment.



Do not connect the Network Termination Device to a power point using an extension cable, double adapter, power board or any other kind of secondary plug or socket.



Do not cover or paint any part of the equipment.

OUTSIDE YOUR PROPERTY



The Outdoor Antenna is a professionally installed fixed wireless modem with an antenna specifically pointed in the direction of the fixed wireless facility. The height and direction of the antenna is specially tuned to your premises. It is important that the equipment is not moved and nothing is placed in front of the Outdoor Antenna, as this will likely affect the signal quality and therefore the performance of the system.

If any external construction work is carried out at your property, NBN Co recommends you contact your service provider after the work is completed to get a system check carried out to ensure the installation is still operating at peak performance for your premises.

Do not cover or paint any part of the equipment.



Keep branches and shrubs away from the Outdoor Antenna.

TROUBLESHOOTING CHECKLIST

If any services provided through your Network Termination Device stop working, please check the following:

1. POWER CHECK

- Check the power indicator (b) on the Network Termination Device is illuminated green and is not flashing.
- Is it plugged in to a power point and is it turned on?
- Do you have power coming into your property?

2. INDOOR NETWORK TERMINATION DEVICE

Check the 'ODU)) 'LED indicator light on the Network Termination Device. It should show a steady or blinking green light.

Check the 'STATUS' LED indicator light on the Network Termination Device. It should be blinking green.

Watch the indicators for approximately 60 seconds to ensure they are not changing/resetting. Note down the colour and state (steady or blinking) of each LED indicator.

3. OUTDOOR ANTENNA

Have a look at the Outdoor Antenna. Can you see any obvious damage? For example, a fallen branch could have knocked it out of alignment.



NETWORK TERMINATION DEVICE INDICATOR LIGHTS

| INDICATOR | MEANING | ACTION |
|----------------|--|---|
| | | TOTO: |
| GREEN | Power On | No action is required. |
| NO LIGHT | No power | Check the Network Termination Device is plugged in and switched on. |
| INDICATOR | MEANING | ACTION |
| GREEN FLASHING | Normal Operation | No action is required. |
| GREEN | Device is in test mode | No action is required. |
| AMBER FLASHING | Device is starting up and initialising | No action is required. |
| RED | There is a system fault | Contact your service provider for assistance. |
| INDICATOR | MEANING | ACTION |
| GREEN | Online | No action is required. |
| GREEN FLASHING | Activity | No action is required. |
| RED | Offline | Contact your service provider for assistance. |
| RED FLASHING | There is an error | Contact your service provider for assistance. |
| INDICATOR | MEANING | ACTION |
| RED | Low signal strength (no fault) | No action is required. |
| AMBER | Medium signal strength | No action is required. |
| GREEN | High signal strength | No action is required. |
| | © 1990.5 00.4 1 | Property of NBN Co Do has Flemove |
| | RED RED FLASHING RED | REEN FLASHING REEN Device is in test mode AMBER FLASHING Device is starting up and initialising RED There is a system fault NDICATOR MEANING GREEN Online GREEN FLASHING Activity RED Offline RED FLASHING There is an error NDICATOR MEANING RED Low signal strength (no fault) AMBER Medium signal strength GREEN High signal strength |

FREQUENTLY ASKED QUESTIONS

What if I damage the equipment?

You are responsible for the Network Termination Device and Outdoor Antenna on your property, just as you are responsible for connection equipment for other services such as power, phone and gas. If you accidentally damage any of the equipment or cable, you will need to contact your service provider for repair and you may be charged for the repair.

Is the NBN Fixed Wireless Network safe?

Yes, it is safe. The NBN Network Termination Device has been designed to be installed and maintained by professional, trained technicians. 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.

Can I connect other devices to the unused ports on the Network Termination Device?

Each port on the Network Termination Device is reserved for a different service in case you choose to use services from more than one service provider. Ports that you aren't purchasing services for won't work. If you connect one of your devices to an unused Network Termination Device port it will not have access to a service.

What if I want to move the Network Termination Device or Outdoor Antenna?

If you need to have equipment or cables relocated, contact your service provider who can advise you of the cost and also arrange for a technician to move the equipment. When considering relocating NBN equipment or cables you should bear in mind the following:

- The Network Termination Device must be protected from water, steam or excessive heat.
- The location of the Network Termination Device must be well ventilated, near a dedicated power point and easy for you to check the indicator lights.
- The Network Termination Device must be positioned in a location away from busy areas and protected from damage, where there is sufficient light to see if the device is functioning correctly.
- The Outdoor Antenna location is determined by Radio Frequency performance. It may not be possible to relocate this to any other position on site.
- You are responsible for the relocation cost.

What if I want to renovate my premises?

If the renovation is changing the physical shape / structure of your premises, then this may affect the signal performance of the Outdoor Antenna. Before starting any renovation work you may need to have the Outdoor Antenna moved to a more suitable physical position. Your service provider can arrange this.

If the renovation is internal to the premises, and is affecting internal walls – then care needs to be taken not to re-route the cable that connects the Network Termination Device to your Outdoor Antenna.

If in doubt, contact your service provider for advice.

I have a monitored home or premises security system, will it work over the NBN?

If you would like to use an existing system, you should check with your security system provider to ensure that your particular equipment and service is NBN-compatible, and check with your service provider that they can support this function with your connection.

Can I run everything on a wireless network within my premises?

Yes, it is possible to run most services over a Wi-Fi network within premises but should you find Wi-Fi limiting for any reason there are other options. For instance, powerline networking adapters can make a home network by using existing electricity wiring in your house. These plug directly into home powerpoints and use existing in-home electrical wiring for data networking, avoiding the need to install new cables. For more information search "powerline network adaptor" through your internet browser.

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.

Who do I contact for assistance?

Your service provider will help you if you have any questions or need to report a fault.