User Guide

nbn™

Australia's broadband network

Sky Muster™ service

Includes information about your nbn™ supplied equipment

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i **Please refer to this guide and the important safety warnings on the back cover before attempting to perform maintenance on your nbn™ supplied equipment.**

Contents

Your Sky Muster™ service user guide

Congratulations on connecting to the **Sky Muster**™ service through your chosen service provider.

Sky Muster™ service is designed to provide access to affordable satellite broadband services for regional and remote Australians.

Services delivered over the **nbn™** network have the potential to transform many aspects of our lives including connected health and education services, benefits to agriculture, business and community sectors as well as entertainment. Your new **Sky Muster**™ service gives you access to this vital communications infrastructure.

This guide provides information on how to help ensure your **nbn™** supplied equipment stays in good working order.
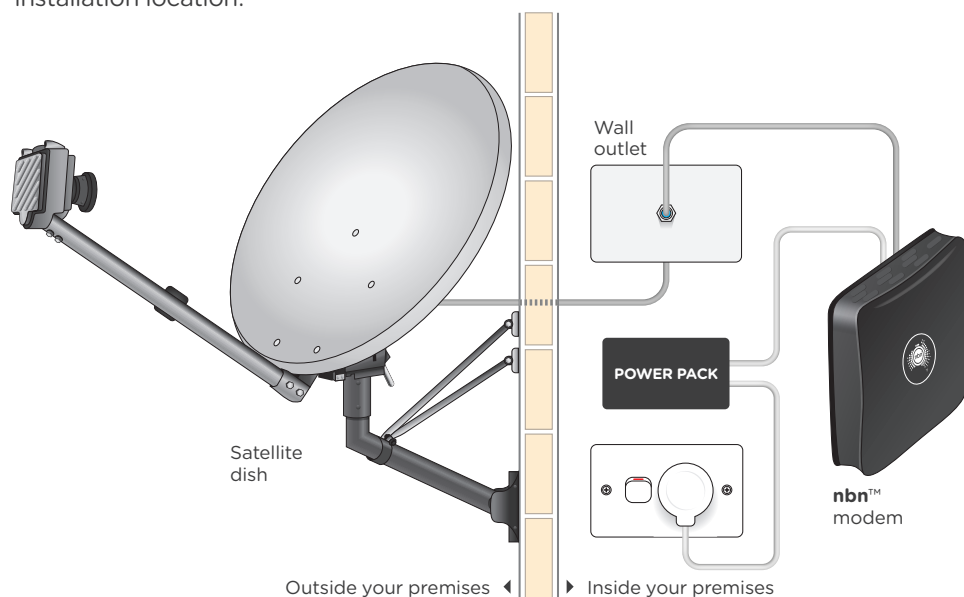
Australia's
broadband
network

Your new **nbn**™ supplied equipment

The equipment installed is comprised of three components:

» The satellite dish and cable that connects the satellite dish into your property;

» The wall outlet; and

» The **nbn**™ modem which is the hand off point between the **nbn**™ network and your internal wiring connected equipment.
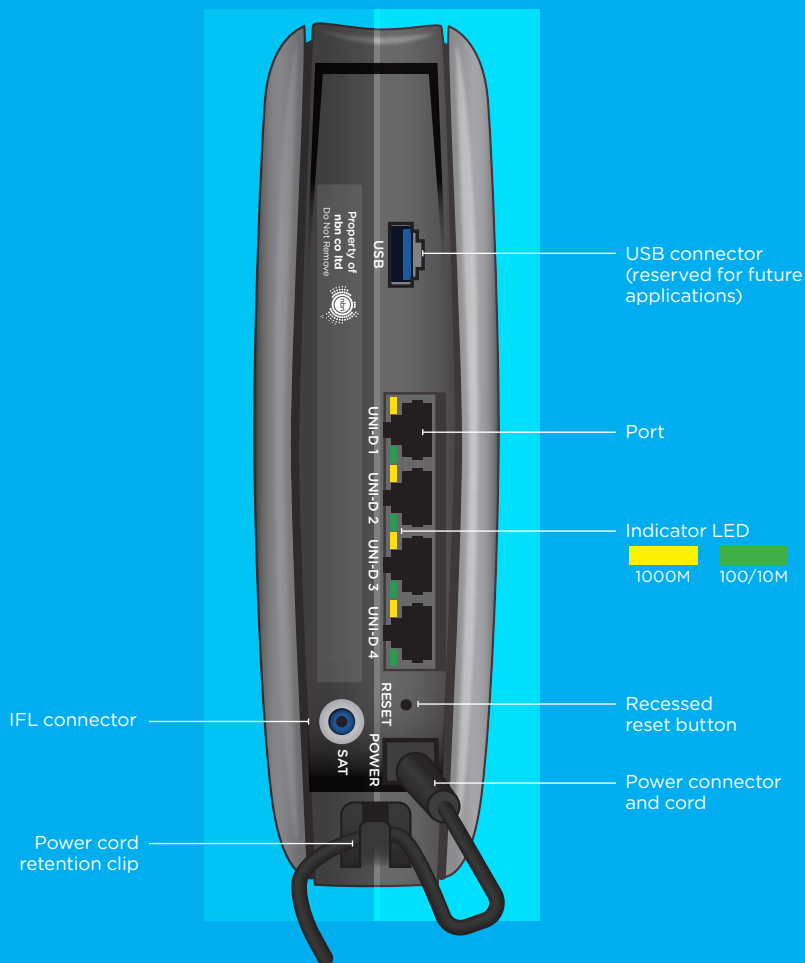
Once your nbn supplied equipment has been installed and checked by the nbn approved installer, depending on your service provider, you can commence using your Sky Muster service. If you have problems connecting to the internet, you should contact your service provider to have your service activated. Once you have an active service you can connect your equipment to your **nbn**™ modem following the information on the next page, and begin enjoying your new service over the **nbn**™ network.

Note: Some installations may need a second power pack, depending on the installation location.

Wall outlet

POWER PACK

Satellite dish

nbn™ modem

Outside your premises ◄ | ► Inside your premises

Connecting the **nbn**™ modem to your own equipment

The back of the **nbn**™ modem has a row of ports, as seen below;

Property of
nbn co ltd
Do Not Remove

USB

UNI-D 1

UNI-D 2

UNI-D 3

UNI-D 4

RESET

SAT

POWER

USB connector
(reserved for future
applications)

Port

Indicator LED

1000M   100/10M

IFL connector

Recessed
reset button

Power connector
and cord

Power cord
retention clip

If you have followed the instructions from your internet service provider and your internet or other broadband connections are NOT working, or there are any red or amber flashing lights on the **nbn**™ modem, go straight to the troubleshooting checklist on page 10.

Note: Apart from steady yellow or green lights, the Port indicator LED could also be yellow blinking or green blinking lights.

General information about connecting the **nbn**™ modem to your own equipment

Your **nbn**™ modem is connected to the satellite dish via the cable which connects to the Interfacility Link (IFL) connector located at the back of your **nbn**™ modem.

The USB port is provided to allow future software features to be implemented. This port is non-functional and is not for end user use at this time.

Your computer or local network should be connected to one of the Ethernet connectors at the rear of the **nbn**™ modem.

Quick reboot

For a quick reboot of the processor, simply press and release the reset button.

You should be advised by your internet service provider on how to connect any necessary equipment to the correct port for the service. These ports are assigned to active services that must be purchased by the user through their provider. Ports without services are inactive.

All cables that connect the **nbn**™ modem to the satellite dish and those that are required for the **nbn**™ modem to operate will need to be supplied and connected by your **nbn**™ approved installer. These cables will be securely connected upon installation. Do not attempt to remove them or alter the connection in any way.

Any extra cables which may be required to connect your own equipment to the **nbn**™ modem will need to be supplied by you or your service provider.

Satellite dish warning

IMPORTANT SAFETY NOTICE

Do not allow any part of your head or body to come within the satellite dish beam area as indicated in this diagram.

SATELLITE DISH BEAM AREA

When visually inspecting the satellite dish:

Do not allow any part of your body to come within the satellite dish beam area.

**Do not** attempt to access a roof area without appropriate training and equipment.

For additional safety when inspecting the satellite dish, always ensure the **nbn**™ modem is unplugged from the power pack.

Maintaining your **nbn**™ supplied equipment

The **nbn**™ supplied 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 equipment stays in good working order.
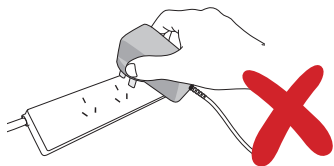
Inside your property
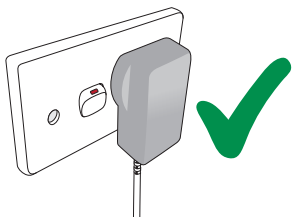
Keep the **nbn**™ modem plugged directly in to the main power at all times and turned on (except when conducting maintenance on the satellite dish).

Regularly check the LED light indicator on the **nbn**™ modem. If it is not showing a solid blue light, refer to the LED indicator table on page 11 for meanings and/or necessary actions.

Do not connect the **nbn**™ modem to a power point using an extension cable, double adapter, power board or any other kind of secondary plug or socket.
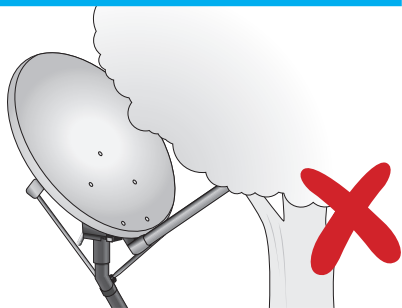
Do not use water or any other liquid to clean the equipment.

Do not cover or paint any part of the equipment.

Outside your property

The satellite dish is professionally installed and specifically aligned in the direction of the satellites in space.

It is important that the equipment is not moved and nothing is placed in front of the satellite dish, 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** recommends you contact your internet service provider after the work is completed to get a system check carried out and ensure the installation is still operating at peak performance for your premises.

Do not cover or paint any part of the satellite dish.

Keep branches and shrubs away from the satellite dish.

Troubleshooting checklist

If any services provided through your **nbn**™ modem stop working, please check the following:
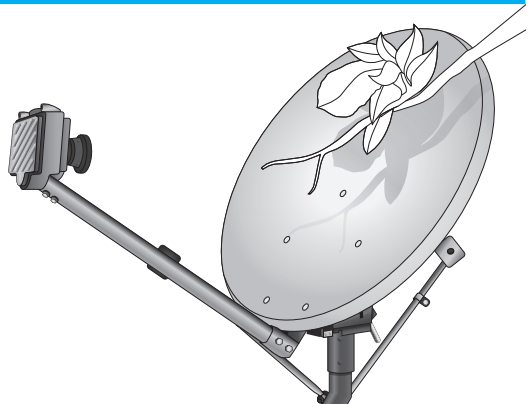
1. Power check

» Check the power indicator (⏻) on the **nbn**™ connection box, the round indicator is illuminated.

» Is it plugged into an active power point? Have you tried another power point? Do you have power coming into your property?

» Is the Power Pack faulty?

2. Indoor nbn™ modem

» Check the Ethernet connection indicator lights on the rear of the **nbn**™ modem. They should all show steady yellow, or green lights.

» Check the side indicator light on the side of the **nbn**™ modem. It should be a steady solid blue when you are using your internet service.

» Watch the indicators for approximately 5 minutes to ensure they are not changing or re-setting. Note down the colour and state (steady or pulsing) of each LED and reference the table on page 11 for LED indicator meanings and/or necessary actions.

3. nbn™ Satellite dish

» Have a look at the satellite dish. Do you see any obvious damage? For example, a fallen branch could have knocked it out of alignment.

» Make sure you follow the safety guidelines on page 7 when inspecting the dish.

nbn™ modem indicator lights

	Indicator	Meaning
●	No Light	No power
○	Solid White	Initial power up
◉	Pulsing White	Attempted network entry
●	Solid Blue	Online
◉	Pulsing Blue	Device busy and working normally
●	Solid Amber	Sleep mode
◉	Pulsing Amber	Installation mode
●	Solid Red	Device reboot required; if this does not clear then call for service
◉	Pulsing Red	Fault detected Call for service

Frequently asked questions

What if I damage the **nbn**™ supplied equipment?

nbn retains ownership of the satellite dish and **nbn**™ modem but you are responsible for this equipment while it is 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 **nbn**™ supplied equipment or cables, you will need to contact your internet service provider for repair and you may incur a cost for the repair.

What if I want to move the **nbn**™ modem or satellite dish?

If you need to have **nbn**™ supplied equipment or cables relocated, contact your internet service provider who can advise you of the cost and also arrange for a technician to move the equipment.

When considering relocating **nbn**™ supplied equipment or cables you should bear in mind the following:

» The **nbn**™ modem must be protected from water, steam or excessive heat.

» The location of the **nbn**™ modem must be well ventilated, near a dedicated power point and easy for you to check the indicator lights.

» The **nbn**™ modem 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 satellite dish location is chosen to provide the best line of sight to the satellites in space. 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 you are renovating your home which will require the relocation of your **nbn**™ supplied equipment then you should contact your internet service provider.

Your internet service provider may arrange this and advise of any additional costs.

Can I use the **nbn**™ Sky Muster™ service for Voice over IP (VoIP) services?

Your internet service provider may offer a VoIP service and may need additional equipment.

This service does NOT replace your normal telephone landline and should not be relied upon for emergency calls.

Can I connect a wireless network within my premises?

It is possible to connect a wireless router to the **nbn**™ modem to share the service from multiple devices such as computers, tablets and smart phones.

Who will set up my wireless router?

Your internet service provider may offer a wireless router as part of the service and will therefore be able to help you if you have any questions or require assistance in configuring your wireless router.

In cases where your internet service provider did not provide the wireless router you will need to contact the retailer or manufacturer for assistance.

Do I need to install any cables and outlets?

nbn will install the cables and equipment to an agreed point in your home. You are responsible for any other cables to connect to the **nbn**™ modem LAN port to your devices such as computers and wireless routers. It is possible to run most services over a Wi-Fi network, but you may prefer to have cabled connections.

You can arrange for a cable installer to install points before the **nbn**™ installation or you can wait until you and the **nbn**™ approved installer have agreed on the location of your **nbn**™ modem. 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 if I have a fault?

Your internet service provider should be able to help you if you have any questions or need to report a fault.

Who will set up my email account?

Your internet service provider may offer an email service and will therefore be able to help you if you have any questions or require assistance in creating your email account.

ⓘ Important safety precautions

BEFORE INSTALLING THE **nbn**™ MODEM, MAKE SURE YOUR ELECTRICAL OUTLET IS PROPERLY WIRED AND YOUR COMPUTER EQUIPMENT IS PROPERLY GROUNDED. CONSULT WITH A LICENSED ELECTRICIAN IF YOU ARE NOT SURE.

READ AND UNDERSTAND ALL OPERATING INSTRUCTIONS IN THIS USER GUIDE. READ AND UNDERSTAND ALL SAFETY PRECAUTIONS PRIOR TO CONNECTING ANY CABLES TO THE **nbn**™ MODEM.

Warnings

A WARNING is defined as a procedure or practice that, if not correctly followed, could result in injury, death, or long term health hazard.

Always observe the following WARNINGS:

ⓘ **There are no user-serviceable parts inside any of the equipment in your system.** There are potentially lethal voltages inside the equipment. It should only be opened by a technician trained and certified to service the product.

ⓘ **RF Radiation Hazard.** The transmitting equipment is capable of generating RF levels above the maximum permissible uncontrolled exposure level. Do not enter the radiation beam pattern of the transmitter feed horn and/or satellite dish when the transmitter is on.

ⓘ **When the nbn™ modem is powered on, DC voltage is present on the rear panel TX and RX connectors.**

ⓘ **To prevent fire or shock hazard, do not expose this appliance to rain or moisture.** The apparatus must not be exposed to dripping or splashing and no objects filled with liquids, such as vases, should be placed on the apparatus.

ⓘ **Postpone nbn™ modem installation until there is no risk of thunderstorm or lightning activity in the area.**

ⓘ **To prevent electrical shock, if the unit is provided with a polarized plug, do not connect the plug into an extension cord, receptacle or other outlet unless the plug can be fully inserted with no part of the blades exposed.** The power pack input power cord must be connected to a properly grounded three-prong AC outlet. Do not use adapter plugs, or remove the grounding prong from the plug.

Cautions

A CAUTION is defined as a procedure or practice that, if not correctly followed, could result in equipment damage or destruction.

Always observe the following CAUTIONS:

ⓘ **Only use the power pack provided with the nbn™ modem.** Using a different power pack may

cause equipment damage. To ensure regulatory and safety compliance, use only the provided power and interface cables.

Do not open the unit. Do not perform any servicing other than that contained in the installation and troubleshooting instructions. Refer all servicing to qualified service professional.

Avoid damaging the nbn™ modem with static by first touching the coaxial cable connector when it is attached to the earth grounded coaxial cable wall outlet. Always first touch the coaxial cable connector on the **nbn**™ modem when you are disconnecting or re-connecting your Ethernet cable from the **nbn**™ modem or your computer.

To prevent overheating, do not block the ventilation holes on the sides of the unit.

Only wipe the unit with a clean, dry cloth. To avoid equipment damage, never use cleaning fluids or similar chemicals. Do not spray cleaners directly on the unit or use forced air to remove dust.

The user should install an AC surge arrestor in the AC outlet to which the nbn™ modem is connected. This is to avoid damage to the equipment by local lightning strikes and other electrical surges.

We recommend that you talk to your internet service provider regarding the use of Uninterrupted Power Supply power protection devices in areas that are prone to frequent brown outs or unreliable grid power supply.

Notices

This product was qualified under test conditions that included the use of the supplied cable between system components. To be in compliance with regulations, the user must use this cable and install it properly.

Different types of cord sets may be used for connections to the main supply circuit. Use only a main line cord that complies with all applicable product safety requirements of the country of use.

Installation of this product must be in accordance with national wiring codes.

Hereby, ViaSat, Inc., declares that this **nbn**™ modem is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Additionally, this **nbn**™ modem is compliant with the Australian RCM mark under Safety standard AS/NZS 60950.1 and EMC standard AS/NZS CISPR 22/24.

For more information 1800 687 626 | nbn.com.au | info@nbn.com.au